

THE *Country* GUIDE



JANUARY, 1956

FARM OUTLOOK ISSUE

Looking Ahead

IN
1956



Amid the realities and uncertainties which face Western Agriculture in the critical months ahead, United Grain Growers Limited, as for fifty years past, pledges its fullest resources of knowledge, experience and influence in the service of all farmers.

In this spirit, the Board of Directors, Management and personnel extend to all farmers and their families sincere wishes for the New Year.



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[Bert T. Smith photo]

THE Country GUIDE

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COVER: Our cover this month is appropriate to a year when feedlots are fuller than usual. Photographer T. Everett of Medicine Hat, Alberta, discovered an especially active feedlot on the S. & T. Ranch of D. A. Scholten, just outside the city.

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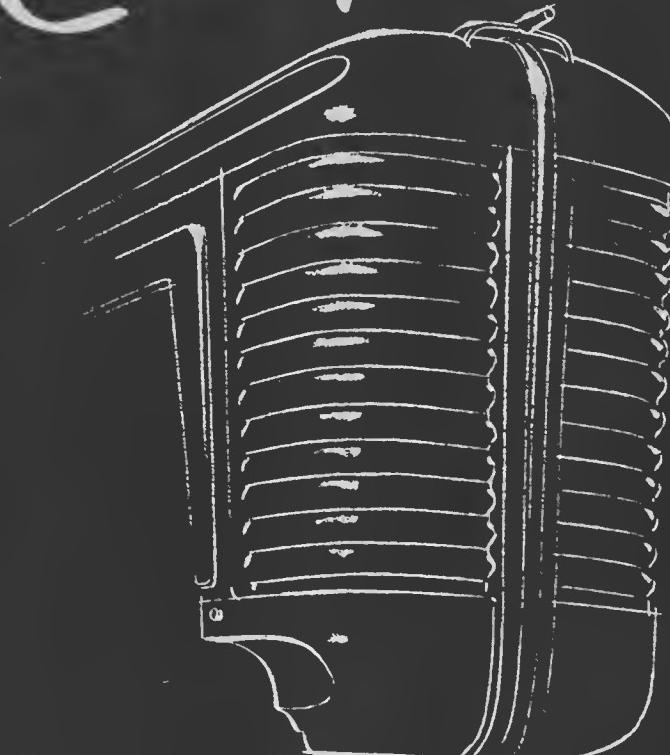
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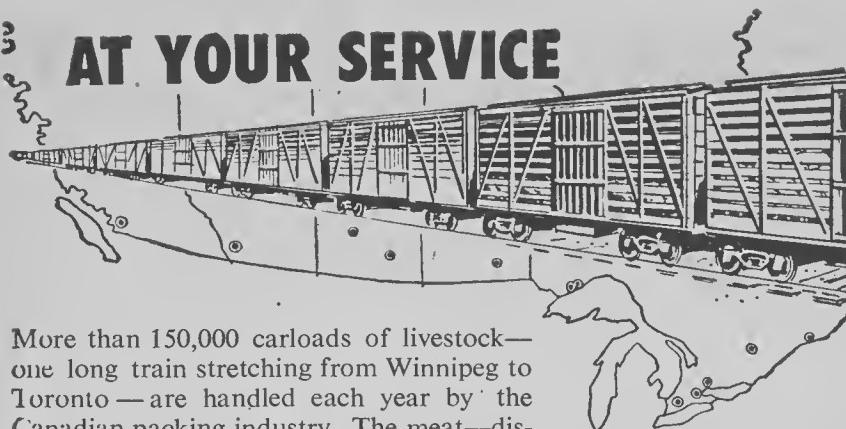
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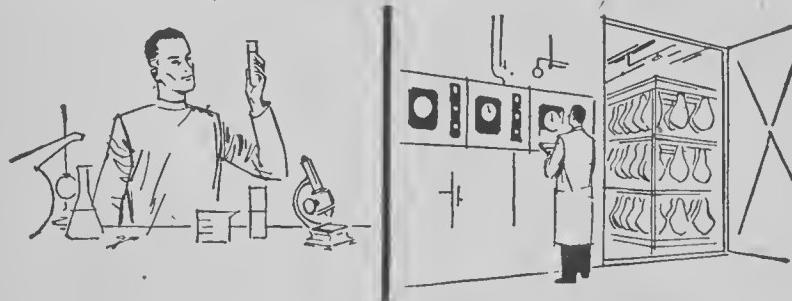
AT YOUR SERVICE



More than 150,000 carloads of livestock—one long train stretching from Winnipeg to Toronto—are handled each year by the Canadian packing industry. The meat—distributed to 45,000 retail stores across the country—would fill a string of refrigerator cars a mile and a half long every day of the year.

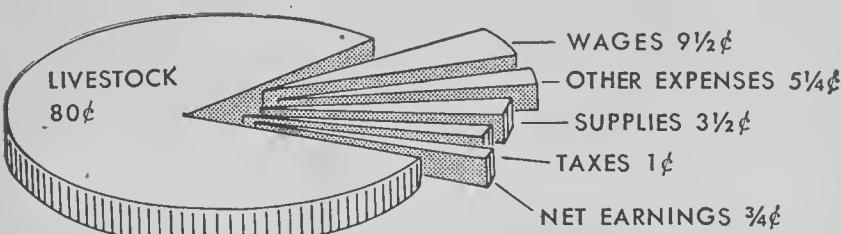
To meet consumer requirements, livestock must be converted by packers into many different forms—some 500 of them—ranging from carcasses and cuts of beef, pork and lamb to a wide variety of processed meats in individual packages. Products flow out of packing plants in many forms—fresh frozen, cured, smoked, cooked. Various styles and sizes of packages assure consumers of a handy, wholesome product.

Another major function of today's packinghouse operations is the recovery and sale of by-products. For every 10 pounds of meat, the industry must sell 1.6 pounds of animal fats and grease, and 1.1 of tank products such as dried blood, bones and meat meal. Markets are also found for 2½ million hides, pelts and skins, over 4 million pounds of wool, hair and bristles and glands for medicinal uses. Handling poultry and dairy products, canned fruits and vegetables, feeds and fertilizer helps reduce the cost of marketing meat and by-products.



Plant engineers and technicians are constantly developing new methods and products so that each pound of every meat animal can be processed and utilized most effectively. Competition, both from within and without the industry, makes research a vital part of modern packinghouse operations.

To perform the wide range of services necessary in handling the tremendous volume of livestock marketed, Canada's meat packing industry has an investment of over \$150 millions in plants and equipment, and spends up to \$10 millions each year to further expand and improve its facilities. The industry employs nearly 25,000 people whose annual earnings are about \$75 millions. More than 2,000 salesmen and agents keep products moving into domestic and foreign markets.



The major part of the meat packer's sales dollar goes to the producer for his livestock. Wages make up another sizable portion. Then there are other expenses—fuel and power, maintenance and repairs and, of course, taxes. Together, these items absorb over 99 cents out of every sales dollar. About half of what is left is plowed back into the industry for improvements, leaving less than half of one cent for dividends to shareholders who risk their capital in the business.



"DOC" BROWNELL'S CORNER

The way I look at it, it's a healthy position for livestock producers to have the processing half of their industry in a sound position and always working to broaden and improve the outlets for meat and other animal products. It would pay any producer to visit a packing plant to see the operations and

talk to the people in charge. Personally I am convinced that the packers do a big job on a small margin when you consider that they put up cash for the livestock, have heavy investments in plants and equipment and pay operating charges before they get the final returns on all the various products.

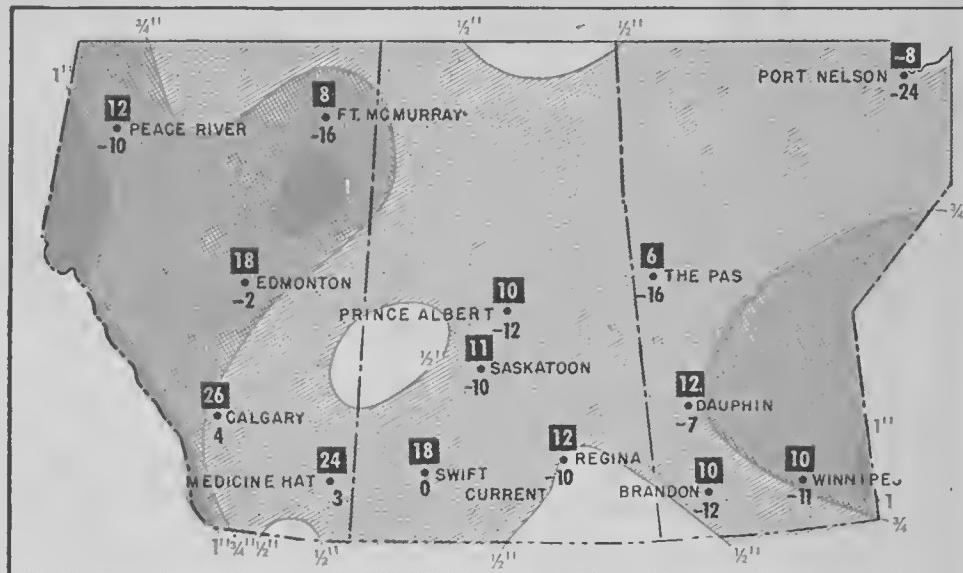
MEAT PACKERS COUNCIL OF CANADA
200 BAY ST., TORONTO 1

Prairie Weather

Prepared by DR. IRVING P. KRICK and Staff
for

THE *Country*
GUIDE

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—ed.)



KEY: TEMPERATURE
73 Max.
53 Min.
PRECIPITATION
Average Inches
During Period

Alberta

Cold weather, so persistent during late fall and early winter, will moderate somewhat during the latter half of January and early February. Temperatures will average several degrees above normal. Greatest positive departures will be experienced in the Peace River and Athabasca regions. Several major cold spells are in the offing, however, at which time minima of 30 to 40 degrees below zero will be characteristic. No unseasonable

PRECIPITATION 30 DAYS ahead	JANUARY 1956			FEBRUARY 1956		
	15	20	25	31	5	10
SNOW						
WARM						

Saskatchewan

Temperatures will be seasonably cold in southeastern Saskatchewan and moderately above normal in the north and west. Extremes on the order of last year are not in prospect. You will recall that temperatures ranged from very cold in January to unseasonably mild in February. Temperatures of 30 to 40 below zero will materialize during the cold spells. Maxima are expected to reach the middle and upper 30's shortly after January 20 and in early February. Although a snow

PRECIPITATION 30 DAYS ahead	JANUARY 1956			FEBRUARY 1956		
	15	20	25	31	5	10
SNOW						
COLD						

Manitoba

Typically seasonal weather is in prospect for Manitoba. Intermittent spells of relatively mild weather will push maximum temperatures a few degrees above freezing. An occasional mild day is expected about January 20 to 24, and during the first week or ten days of February. Minima will skid to 25 to 35 degrees below zero during the cold snaps.

Snowfall will be light, but about average for the time of year. Notable deficiencies will be limited to western

PRECIPITATION 30 DAYS ahead	JANUARY 1956			FEBRUARY 1956		
	15	20	25	31	5	10
SNOW						
COLD						

districts, especially in the lower Saskatchewan basin. Major storminess will be centered about January 26 and February 10. Total snowfall for the period will average about 5 to 10 inches in the west, and 10 to 15 inches in the east. Snow cover of 5 to 10 inches will be typical of the province. Occasional thawing is likely, but winter grains and forage crops are not expected to be exposed during period of cold. Livestock will have little or no opportunity to graze pastures or stubble fields.

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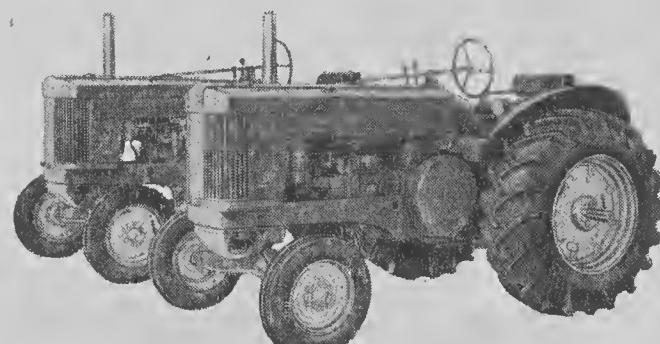
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*Belt h.p. is 67.64; drawbar, 61.76. Sea level (calculated); maximum drawbar horsepower based on 60°F. and 29.92 in. Hg.

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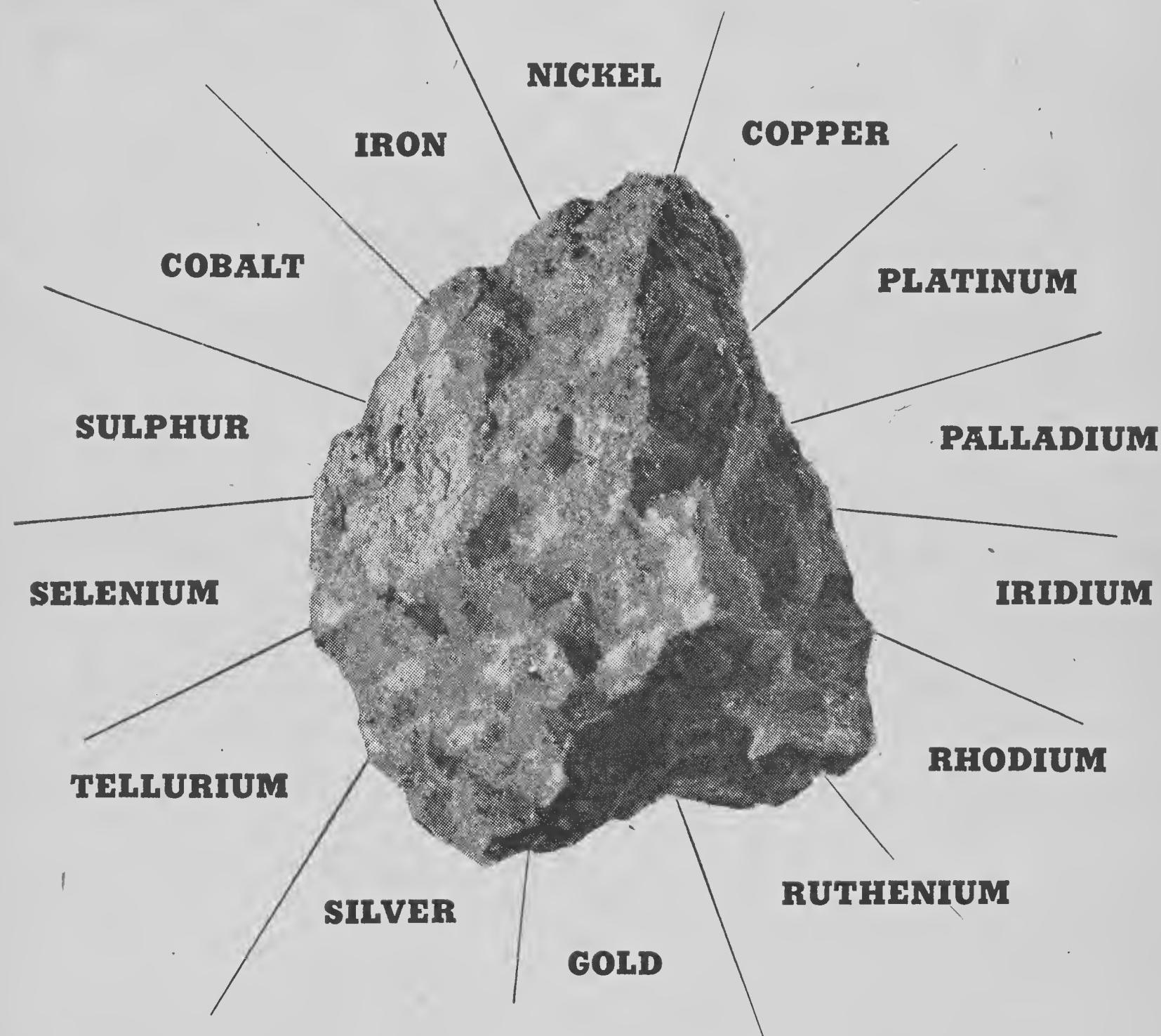
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INCO RESEARCH BRINGS NEW WEALTH TO CANADA

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Sulphur gases are recovered in large and increasing quantities for conversion into industrial products.

In 1954, after many years of cobalt salts production, Inco began producing electrolytic cobalt. And soon, in a new \$19,000,000 plant, Inco will begin the recovery of an exceptionally high grade iron ore.

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Guide
OUTLOOK

Federal-Provincial Conference



Front: J. L. Phelps, IFUC; Rt. Hon. J. G. Gardiner; A. M. Shaw, chairman; H. H. Hannam, CFA; Hon. C. H. Chisholm, Minister, N.S. Rear: Ministers.—Hon. R. D. Robertson, Man.; Hon. I. C. Nollet, Sask.; Hon. F. S. Thomas, Ont.; Hon. C. B. Sherwood, N.B.; Hon. E. Cullen, P.E.I.; Dr. J. G. Taggart (deputy), Ottawa.

THE first Monday in December has taken its place, for some years now, as the fixed date for beginning the annual Federal-Provincial Agricultural Conference at Ottawa. The event takes place as a rule in the large Railway Committee room on the ground floor of the Parliament Building, the majestic structure which overlooks the Ottawa River and houses the House of Commons and the Senate. Neither of these august bodies was sitting in December, and except for those who may have secluded themselves in various degrees of busyness, in offices throughout the building, agriculture had the place pretty much to itself.

Visitors to Ottawa who can find the time to look for them might find many points of interest inside Canada's center of legislation. This writer was surprised and much interested to find, crowded together at one end of a long corridor on the sixth floor, pictures of the British prime ministers; all of them, presumably, as far back as the reign of George III, and some much farther back. No one with a sense of history could fail to be interested by such a gallery of distinguished subjects. Of more direct interest, perhaps, but less satisfactorily displayed, were the pictures of the Canadian prime ministers, from Sir John A. Macdonald to W. L. Mackenzie King. Distributed around a collection of pillars near the front entrance and very unevenly lighted, they appeared to have been left to the discretion of the second assistant charwoman. Surely, in all that vast pile of stone there are more gracious areas where the brooding face of Mr. Meighen, the dour visage of Sir Alexander MacKenzie (he who is said to have remarked after the adoption of the National Policy, that "the heart of a Tory is full of guile and desperately weak")¹, and the solemnity of Sir Robert Borden, could be displayed to better advantage for the edification of posterity.

Oh well, let's get back to Mr. Gardiner, now in his 20th year as Minister of Agriculture for Canada, who may have wanted to be hung with the rest of them, but must be content with having been an able minister for that long period, unlike any other able minister since Confederation. Mr. Gardiner invariably makes two principal speeches at these conferences, one at the beginning and one at the end. The first speech is prepared and, therefore, the shorter of the two: the final speech is off-the-

The annual December conference between Federal and Provincial Departments of Agriculture and farm organizations faces problems of abundant production and declining prices

by H. S. FRY

cuff and invariably carries the wind-up well into the lunch or dinner hour, as the case may be.

THE December Conference is concerned with both production and marketing. There had been suggestions favoring a special national marketing conference between federal and provincial departments of agriculture and farm organizations. This Mr. Gardiner saw little need of, since it seemed fruitless to hold a second national conference to talk about the matters which could be appropriately discussed at the first. He himself was especially concerned with explaining to delegates matters arising out of the Agricultural Prices Support Act, particularly the purpose which parliament had in mind when the legislation was passed, and the working of the Act with respect to butter and eggs.

So far, since 1946, when the Act was first put into operation, the government has employed approximately \$300 million in the operation of price support programs. A little less than 75 per cent of this has come back to the government as salvage, or money received by the Agricultural Prices Support Board for products sold. Of the \$89 million that did not come back, \$70.1 million was written off against the foot-and-mouth disease outbreak in Saskatchewan, in 1952, so that the net consequence of normal price support operation had been a loss of about six per cent of the total government funds employed, or \$18.7 million.

Of this amount, potatoes in three different years accounted for a total of a little more than \$2 million; apples, including 1954, when Hurricane Hazel swept through Nova Scotia orchards, a total of \$6.8 million; white beans, honey and skimmed milk over six years, a combined cost of \$677,000; cheddar cheese over five years, \$155,000; butter over six

years, \$3.1 million, with another \$3 million probable in the current fiscal year; and shell eggs over five years, \$183,000, with an addition of \$500,000 probable on account of the 1954 program and \$50,000 during the current fiscal year.

With respect to butter the Minister said that if the Board exports 20 million pounds, it will have no more than the average of the last five years in storage, at any time from January 1 on. As long as butter is needed to stabilize prices to both producers and consumers it is not surplus, in the opinion of the government. If the cost this year amounts to \$3 million, it will not have averaged more than one-fifth of a cent a pound over the past six years to support the butter price; and Mr. Gardiner reported the Dairy Council as saying that the support price "has resulted in the farmer getting 15 per cent more of the retail price than he got before."

With respect to eggs, the Minister explained a loss of \$700,000 on eggs a year ago, as the result of certain action or lack of it, in the trade. At that time it was announced that a change would be made in the regulations, as a result of which the loss this year is estimated to be very small, as already indicated in this article. "I am sure," he said, "that with the experience of this year, there will be little, if any, loss charged up to the treasury should a similar plan be in effect in the future."

THE Minister made reference to the Co-operative Marketing Act, under which co-operative marketing organizations may secure agreements with the Federal government, by which the government guarantees to the bank the initial payments made by the co-operatives. Since the Act was passed in 1939, a total of 131 agreements have been completed, which have resulted in losses totalling \$7 million of government money. Of this amount \$2 million was accounted for by furs, over two years, and the remaining \$5 million by P.E.I. and N.B. potatoes, in 1953. These losses, said the Minister, were productive, in that they did increase the return to the potato growers and fur farmers.

Mr. Gardiner always likes to take a crack at the concept of parity, and has repeatedly pointed out that the base period for board operations is the last three years of the war, 1943-45. He explained, even if he may not have convinced delegates, that government policy is now (Please turn to page 34)

Guide
OUTLOOK

1956 FARM PROSPECTS

A digest of commodity and special-subject reports presented to the Federal-Provincial Agricultural Conference in Ottawa last month

THE information brought together on these two pages represents an attempt by the editors of The Country Guide to present readers with a digest of all of the important reports presented to the Federal - Provincial Agricultural Conference held in Ottawa last month. These reports, in turn, represent estimates and opinions, based on careful studies of available facts and experience, by carefully selected committees of qualified Federal officers.

It is hoped that this information will be useful in assisting farmers to plan their 1956 operations. Farm planning decisions in Canada are made by some 600,000 farmers working, for the most part, independently, and facing a very wide variety of conditions involving land, labor, capital, climate, pests and diseases, as well as markets. Despite the variety and importance of these factors, the only decision that counts on an individual farm is that of the farmer and his family. In the long run, he must base his decision on such facts as are available, plus a very important element of judgment and opinion. What follows here contains some of both, for what it may be worth to him.

The International Situation. The world economic outlook, at present, is favorable. Business in most countries is expanding and in North America the gross national production of both Canada and the United States has reached record levels. Only a few countries are experiencing balance of payments difficulties with other countries. World prices for most industrial raw materials have strengthened, but in North America and several overseas countries, agriculture has not shared in the generally buoyant conditions. The consequence has been some large accumulated surpluses which continue to hang over world markets. U.S. surpluses especially, dominate world trade in foodstuffs, but some progress has been made in slowing down the accumulation of surpluses in that country, and introducing more flexibility into the U.S. domestic price-support programs.

Trends. The level of free world trade in 1955 was significantly higher than in 1954. Continental western Europe increased exports to North America, but inflationary tendencies have developed from the increased demand in these countries for imported raw materials.

The General Agreement on Tariffs and Trade (GATT) was revised during the year. The U.S. tariff on eviscerated turkeys has been lowered. Import restrictions on oats and barley were lifted September 30, but rye quotas were renewed for two years ending June 30, 1957, and import restrictions on such products as wheat, wheat flour, rye, dairy products, flax seed and linseed oil continue to apply. The increase of U.S. customs duty on alsike clover seed, effective July 1, 1954, is also continued until June 30, 1957, but the amount that may enter at the lower rate has now been raised from 1.5 million to 2.5 million pounds

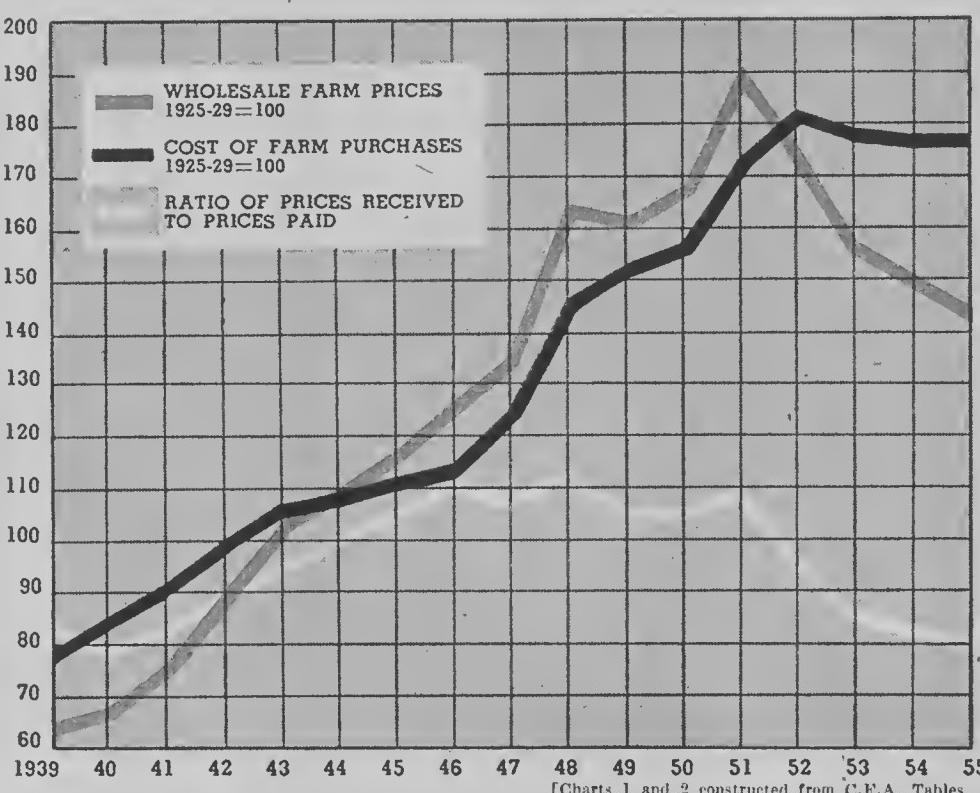


Chart 1. It is clear from this chart that the relationship between the prices the farmer receives and the prices he pays is back to about where it was in 1939 and 1940. The chart illustrates how unfavorably the farmer is situated at present, with respect to an exchange of his products for the goods and services produced by the non-farm population. In short, the chart illustrates the principal reason why, on the average, farmers are now unable to share in the prosperity of the nation, at a time when other segments of economy are prospering as never before.

per year. The Canadian tariff now provides an additional duty on state-subsidized goods from abroad, which is equal to the amount of the subsidy.

Economic Outlook in Canada. Canada's gross national product exceeded \$27 billion in 1955, and will continue to expand, though perhaps at a slower rate. Farm cash income this year is expected to be about the same as for 1955. Grain deliveries in 1956 are not expected to vary greatly from 1955.

In Canada, consumer spending has been heavy and personal income high. Export trade has been strong in the last half of the year and construction activity was well ahead of the first half of the year. Except for agriculture, Canadian industry has been in a strong situation, assisted by excellent foreign markets for industrial and some primary products. Trade with the United Kingdom may be limited somewhat by balance of payment difficulties in that country, though sales to the U.K. will be fairly well maintained. Capital investments will remain high and over-all personal income should be sustained.

Farm Supplies. No appreciable change is expected in supply of farm machinery or fertilizers though fertilizer prices may decrease slightly. Anhydrous ammonia is now produced both in eastern and western Canada and some new nitrogen solutions should be available in eastern Canada for the spring season. The use of pesticides is expected to increase about 15 per cent, but supplies will be ample.

Farm Labor. In 1955 the seasonal peak for hired farm workers dropped to the lowest level since 1951. Demand will be greater this year and a considerably larger number of immigrant farm workers can be absorbed. Non-farm areas will compete strongly for hired help in the early spring months, and except in Quebec and the Maritime provinces, increases in construction activity may create a further drain on farm labor supply.

Livestock

Hogs. About 6 million market hogs are expected in 1956, or a little more than in 1955. Heavy supplies experienced in the last quarter of 1955 are expected to continue until summer. About 10 per cent more eastern hogs will be marketed in the first quarter, but the increase will disappear in the third quarter. Western Canada will probably market about the same number as last year during the first three quarters, but stocks of farm-held feed grains combined with relatively low feed prices are expected to produce western marketings somewhat greater in the last quarter of the year than in 1955. In the United States record crops of feed grains suggest a continuing high level of hog production; consequently lower average hog prices are likely to offset somewhat higher marketings in Canada.

Cattle. Cattle prospects include heavier marketings, slightly lower prices, little change in the numbers exported, but a further increase in the amount of beef required for the home market. Last June, cattle numbers reached 10.2 million, equal to the

1945 record total, all classes except heifers for milk showing increases. The peak of the third cycle since 1928 is expected this year. There may be a slight reduction of beef breeding stock, because of increased marketings of cows during the last three years. Meat consumption has increased since 1951, but supplies of roughage have not increased and cattle prices have declined more than prices for other farm products. During the first seven months of this year large offerings of the two top grades of cattle are in prospect, because of increased feedlot activity in western Canada. Net marketings and inspected slaughter may increase by four or five per cent and approach the 1948 record figure (1.8 million), but a heavier cow slaughter will produce lower average carcass weights. Prices of top quality cattle may weaken early in the year, due to heavy supplies of fed cattle in late winter and spring, but will probably fare better than the lower grades, which are likely to remain slightly below 1955 levels throughout the year. Increased consumption is expected to take care of any increased production.

The ratio of calf to steer prices was higher in 1955, than in any year since 1942. Calf marketings may increase by five per cent or more, but increased consumption should take care of part of this increase.

Sheep, Lambs and Wool. Even with a favorable lambing season, 1956 marketings of sheep and lambs are not expected to exceed those of 1955. Lamb feeding is on about the same scale. Numbers are not expected to increase, though lamb prices since 1951 have improved, relative to beef cattle prices.

The combined production of shorn and pulled wool is not expected to vary much from the 8.1 million pounds produced in 1955. World supplies will be slightly larger, but world stocks are slightly increased and increased production of synthetic fiber is in prospect. World prices dropped ten per cent or more from June to September last year, and unless the lower prices stimulate consumption, a further decline may develop.

Eggs. Egg marketings, though lower than a year ago, and likely to remain so for five or six months, will still exceed current consumption slightly. The laying flock was down six per cent by October, because fewer replacement pullets were raised and culling was less vigorous. The 1956 hatch will probably follow the 1954 pattern, when the early hatch was the largest on record, permitting third quarter laying to meet domestic consumption. Pricewise, the situation is less clear. Domestic demand will continue strong, but marketings will exceed consumption. The export market does not look too bright for the next few months, as prices are declining, and Netherlands and Danish competition may be a little keener. If third quarter marketings appear likely to meet consumption demands, egg prices may be depressed during the first six

months, because there will be little incentive to store; consequently a smaller early hatch would exert a buoyant price influence.

Poultry. The broiler industry expanded in 1955 under favorable cost-price relationship and will probably continue to expand this year, though less rapidly. Some caution is advised, because last year was the first time in recent years that live poultry moved across the U.S. border in volume. Continued rapid expansion would probably depress prices. Roasting chickens will probably continue to decline in numbers, because of increasing competition from both chickens and turkeys of broiler weights. Thus the price outlook for heavy chickens is good. Keep in mind that in large urban centers heavy chicken are rapidly losing ground to light chicken. The fowl crop will be down six or seven per cent this year due to the smaller growing flock now on farms. Prices should remain about steady, though competition from other poultry and meats should fully offset the upward influence of smaller numbers.

Turkeys. Heavy turkeys were about three per cent lower in 1955, but turkey broilers were substantially higher, bringing total numbers about the same as 1954. With feed prices down and prices higher to producers, a favorable cost-price relationship in 1955 will probably bring about increased production in 1956 in all areas of the country, but especially in the prairie provinces. U.S. turkeys on Canadian markets largely determine Canadian prices; and U.S. prices are likely to be lower this year than in 1955. The Canadian turkey industry needs to reduce mortality, feed more efficiently, develop more eviscerating capacity and make better use of existing marketing and distribution facilities.

Dairy Products. Dairy cow numbers declined from 1945 to 1951, and have increased from 1951 to date, though more slowly since 1953. Still fewer are likely to be added in 1956. Total milk production will reach about 17.5 billion pounds or two per cent over last year. Of this quantity 6.6 billion pounds will be fluid milk and another two million pounds will be required for cheddar cheese, ice cream and evaporated whole milk. Despite drought in Quebec and Ontario, butter production last year equalled 1954 and is expected to increase somewhat in 1956, especially in Alberta and Quebec. Per capita butter consumption will not change much and total domestic requirements will amount to about 310 million pounds. For the last three years Canada has not produced a great deal more cheese than has been consumed. Per capita consumption is increasing slightly and rose to 76 million pounds last year, with estimated production at around 82 million pounds and consumption at 78 million pounds. The margin between production and consumption in 1956 is likely to be small.

Canadian exports of evaporated whole milk have been shrinking for several years but domestic disappearance has risen sharply. The reverse has been true of dry whole milk of which about 22 million pounds—an all-time record—may be produced in 1956. Evaporated whole milk production

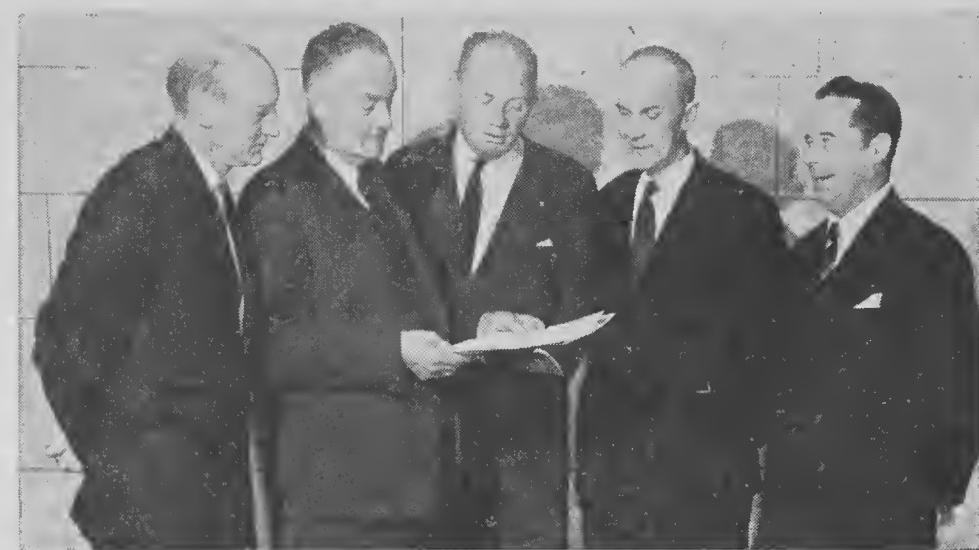
may reach 305 million pounds in 1956 to supply the domestic market at 18.6 pounds per capita and meet the demand of an improved export market. Production of dry skimmed milk last year may have exceeded the 88.2 million-pound record set in 1952. Per capita consumption in Canada of this product has almost doubled in ten years and is still rising. If the domestic market uses 86 million pounds as estimated, not more than about four million pounds will be available for export.

Bread Grains

Wheat. Canada is expected to dispose during this crop year, of the equivalent of an average crop, but will have a carry-over well above the 493.7 million bushels carried over into 1955-56, though considerably less than the record carry-over of 601.7 million bushels as of July 31, 1954. Canadian production in 1955 was 494.1 million bushels, 60 per cent above the 1954 crop, and 11 per cent above the 1945-54 average of 445.9 million bushels. World wheat production in 1955 was 7.3 billion bushels which compares with the all-time high of 7.4 billion bushels in 1952-53. On October 1, Canada, United States, Australia and Argentina had 2.2 billion bushels available for export and carry-over. In addition to Canada and the Soviet Union, France, Western Germany, Italy, Eastern Europe, Turkey, India, Iran, and Australia provided increases. Nine-tenths of Canada's 1955 crop falls into the top four grades and the average protein content is 13 per cent. Counting the substantial quantity of low grade wheat from the 1954 crop, Canada will be able to supply a full range of milling and feed grades in 1956. U.S. surplus disposal programs coupled with heavy subsidization of wheat production in many countries tends to reduce the effect of a strong promotion program for Canadian wheat selling.

Rye. The 1955 rye crop was up slightly over 1954, but total supply was down slightly. The acreage of fall rye is tentatively estimated at 422,000 acres, or 26 per cent below 1954.

Feed Grains. Supply of feed grains is up about ten per cent over 1954-55, and about 22 per cent above the ten-year average. Heavy out-turns of oats and barley more than offset decreases in carry-over stocks, between 1954 and 1955. Oats at 403.8 million bushels and barley at 251.8 million bushels,



At the conference: A. F. Knutsen (Denmark), Dr. J. G. Taggart (Canada), Dr. E. S. Tuinman (Netherlands), F. J. Rossiter (U.S.), R. Coutry (Belgium).

were 32 per cent, and 43 per cent, respectively, larger than the 1954 crop, and 36 per cent above the ten-year average. In addition, the corn crop of 31.5 million bushels and 65.2 million bushels of mixed grains, contribute to national feed grain supplies. The net amount available after allowing for exports, seed and various domestic uses is 15.9 million tons, or 16 per cent more than 1954-55, which is offset only by a four per cent increase in the number of grain consuming animal units. In eastern Canada supplies of local grain are somewhat above 1954-55, but hogs especially have increased in numbers. Western Canada has more livestock, but due to the elevator congestion in western Canada, deliveries of coarse grains have been considerably lower than last year. The carry-over of both oats and barley may show some increase despite increased domestic use.

Feed Supplements. Production of mill feeds will at least equal those of the last crop year, and oilmeal supply, particularly soybean oil, which accounts for about 40 per cent of all high protein supplements, will be adequate. Higher livestock slaughtering will produce greater supplies of packinghouse by-products, which in turn supply 70 per cent of the high protein feeds of animal origin.

Special Crops

Flaxseed. The demand for flaxseed and its products is expected to remain quite strong throughout the crop year, due to demand from western Europe and the U.S.S.R. Canada's 1955 crop was the largest since 1912 and may lead to export of about 15 million

bushels and some addition to year-end stocks.

Soybeans. Ontario harvested a record 5.6 million bushels of this crop, from an average yield of 26.4 bushels, the highest yet reached. A considerable quantity will be exported, though the domestic market could absorb about double the quantity produced. Prices have been lowered, due to lower prices in the United States where a record crop was secured. The price may rise slightly from now on.

Rapeseed. This crop is now grown in all three prairie provinces and increased from 28.9 million to 55.8 million pounds, last year. A considerable portion of the 1955 crop may be exported, but no difficulty is anticipated in marketing the oil or meal processed in Canada. Some addition is expected to the 2½ cents per pound given farmers as an advance payment.

Sunflower Seed. Sunflower acreage was down somewhat from 1954 but good yields produced a crop of 14.4 million pounds, the highest since 1949. All of the crop was in Manitoba and all is processed in Canada to be sold mainly on the domestic market. Acreage is expected to increase markedly.

Husking Corn. The record acreage planted in 1955 produced a record 31.5-million-bushel crop, all of it, except 210,000 bushels of Manitoba corn, produced in Ontario. The supply was considerably above the normal requirement in Canada, but increased feed use is likely to absorb most of the supply, especially at the lowered price, at which it has become quite competitive with other feed grains. Some will probably be exported to the U.K.

Sugar Beets. Both acreage and production were lower in 1955, and at normal extraction rates, would yield about 290 million pounds of sugar, or less than 20 per cent of Canadian requirements. Sugar yield may be higher than last year owing to better harvesting conditions, which will probably mean a higher average farm price per ton of beets. World sugar prices have been relatively stable for the last 12 months.

Dried Beans and Peas. The dried bean crop was up nearly 25 per cent, to 1.3 million bushels, all but 14,000 bushels produced in Ontario. The 1955 crop was about 300,000 bushels over normal Canadian consumption in recent years. Canadian surplus beans usually go to the United States and (Please turn to page 29)

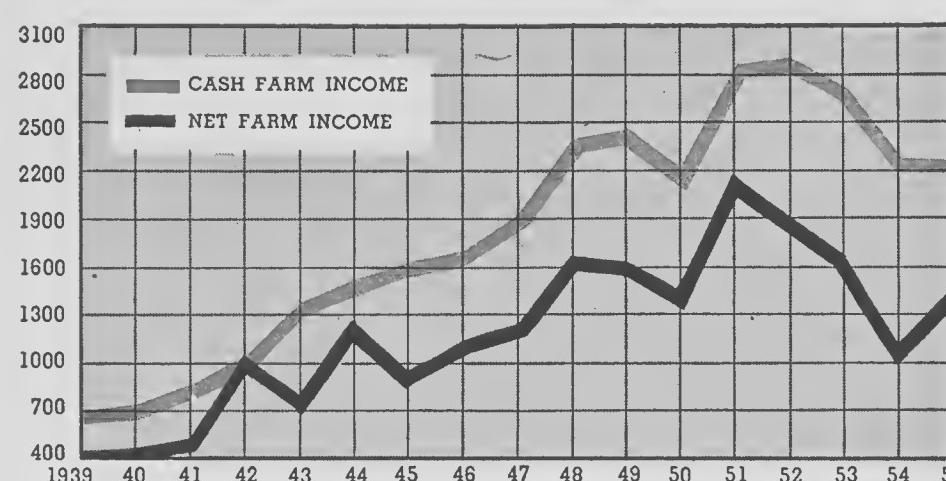
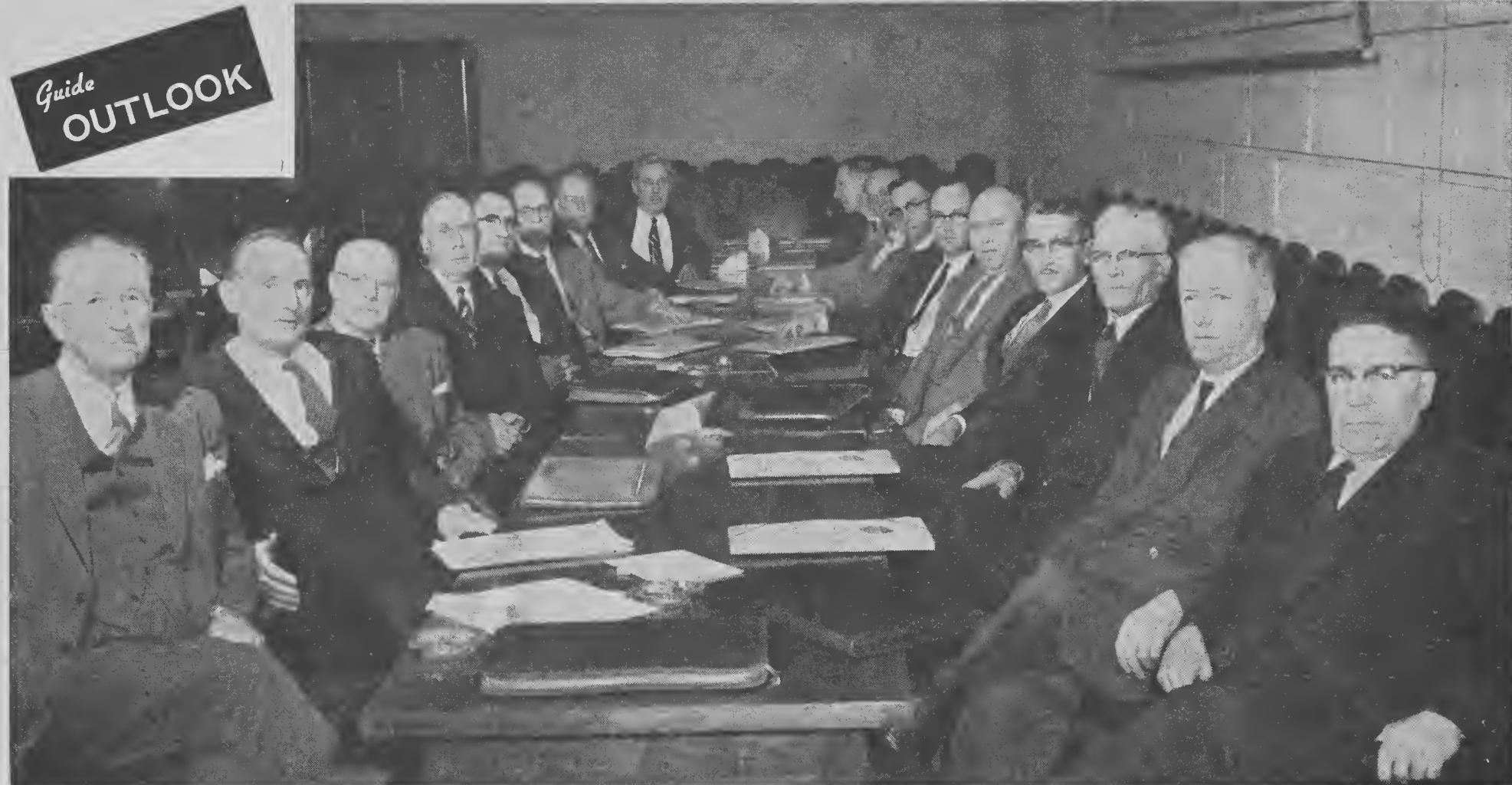


Chart 2. This chart tells the story in a somewhat different way—in terms of net farm income. It shows that the total net income of farmers was less in 1955, than it has been since 1947, except for 1954. Total net income, however, includes calculations of products still in the hands of the farmer, and this year the inventory of grain held by farmers in western Canada is much higher than in 1954. Consequently, a much higher percentage of 1954 income has been available for the payment of expenses than in 1955. If inventory changes are ignored, there has not been much change in the farmer's realized income position from 1954.

Guide
OUTLOOK



Officers and directors of the Canadian Federation of Agriculture at their table during the 17th annual Federal-Provincial Agricultural Conference, which was held in the Railway Committee Room of the House of Commons in Ottawa. H. H. Hannam, president and managing director of the C.F.A., is seen on the extreme right.

C.F.A. Appraisal

*Statement of the Canadian Federation of Agriculture presented by
H. H. Hannam to the Federal-Provincial Agricultural Conference*

THE rural income of the people of Canada—except agricultural producers—is at record levels. Canada is in the midst of an industrial boom. When the final 1955 calculations are made of total volume of farm production, an all-time high level will have been reached.

This means that the productivity of the Canadian farm has reached the highest point in history with the smallest farm labor force in many years—33 per cent below that of the pre-war years. It has been made possible only by heavy increases in the farmer's investment in machinery and equipment, and expenditures in production supplies.

But in spite of this record output and high level of productivity, the Canadian farmer is not, at present, receiving any share of the expanding prosperity now enjoyed by the country as a whole. Canadian agriculture finds itself caught by the piling up of world agricultural production, which, temporarily at least, is running ahead of effective demand for its products.

World trade in non-agricultural goods is 40 per cent above pre-war, but world trade in farm products is about on the same level as in the immediate pre-war period. The position of agriculture in Canada, therefore, in view of a lagging world trade in farm products, would undoubtedly be disastrous were it not for the high general level of consumer purchasing power in the domestic market, a measure of security provided by farm price supports, the advantages of orderly marketing through marketing boards, producers' co-operatives and the Canadian Wheat Board, and other valuable features of our farm program.

While demand dominated markets for farm products during the war and the post-war period, farmers found that, by 1951, practically every major farm product had reached a point where supply began to overtake demand, and, as a consequence, farm prices began to fall.

IN Canada, our parity ratio of prices received by farmers in relation to prices paid by them, reached 110 for the year 1951. This parity position

has been dropping continuously since that time, until, for September of this year, it had fallen to 81—only one point above the parity ratio of 1940. Perhaps the most disturbing factor in this situation is that farm costs, which had gone up to record levels in 1951, have remained stationary, or have increased, rather than decreased in line with farm prices. On the average, our farm costs are now two per cent higher than they were in 1951.

The situation in which our farmers find themselves today is not a Canadian problem alone. The Conference of the International Federation of Agricultural Producers (IFAP) in September, and the Conference of the Food and Agriculture Organization of the United Nations (FAO) in November, emphasized the fact that this cost-price squeeze is fairly general in agricultural countries, with varying degrees of severity. The worst cost-price squeeze, said the IFAP Conference, is in the countries which are important agricultural exporters. It arises, the statement declared, because the prices farmers are paying for their products tend to be stationary, or falling, while the prices they have to pay for their requirements tend to be stationary, or rising.

The statement added that the almost universal adoption of government price support policies is one significant safeguard against disaster. Nevertheless, the growing cost-price squeeze and the accumulation of surpluses in certain key commodities, give producers reason for concern in the years immediately ahead.

The Canadian Federation of Agriculture considers that the unfavorable outlook for better export markets for farm products, and other discouraging features of the world market situation, are the things that increase the anxiety of our farmers about the difficulties facing agriculture in their home economy.

(Reference was made at this point to two tables in the Federation Statement which set out some of the significant features of the present farming situation in Canada. These are reproduced graphically on pages 8 and 9.—ed.)

One of the current trends in our economy today, which is particularly disturbing to the farmer in his present position, is the steadily widening margin between what Canadian consumers are paying for food, and what Canadian producers are being paid for this food. Since 1951, Canadian consumer expenditure for home-produced food has increased substantially, while what the farmer receives for the same food has shown a marked decline. The result has been a sharp increase in the margin between farm receipts for food products and consumer expenditures for similar products. The following figures clearly illustrate this trend:

(A table was included showing the total consumer expenditures for Canadian-produced food (exclusive of fish products) and cash receipts by farmers for this food, as estimated by the Federation, from official government data. The figures indicated that the Canadian farmer's share of the consumer dollar during the last four years has decreased from 63 per cent in 1951, to 56 per cent in 1952, with a further decline to 52 per cent in 1953, and 51 per cent in 1954.—ed.)

WE desire to set forth at this time some views of a general nature which our producers would feel should be stated on their behalf.

Farmers from coast to coast feel keenly that, on the average, their returns have got badly out of balance with those of other major groups in the economy. In fact they feel that the worsening of their relative position has reached a point where it should be recognized that it is of vital concern to the public, as well as to the farmer, that this trend be halted.

Accordingly, whatever action is necessary to ensure that the relative position of agriculture is improved, should be the basis of Canada's national agricultural policy in the coming year.

It will take all of the best thought and the maximum of co-ordinated effort on the part of all elements and agencies concerned with agriculture, including organized producers and their marketing agencies, together with (Please turn to page 30)

Farm Know-How

Ups World Production

Farm science and technical change have been working since the war to increase production as never before

by SOL SINCLAIR

Greater output of food in many parts of the world is due partly to livestock improvement.

[Bob Taylor photo]



LARGE stocks of unsold grain and certain other agricultural products have been the most disquieting feature of the food and agricultural situation in recent years. The appearance of these surpluses, mostly on the North American continent,—and to a lesser extent in other regions—, so soon after a period of intense food shortages, raises some important questions about the state of agriculture. It is clear that all of the world's people are not yet enjoying an adequate level of diet. Though the food eaten per person is now above the low levels of 1947-48, it has not yet exceeded the pre-war level for most of the world's people. Why, then do we have surpluses?

There is no single answer to this question. The answers exist, however, in the twin processes of production and distribution. We are producing farm products at an increasing rate as a result of improved methods and good years, but we fail to increase effective demand among the world's consumers so that the increasing supplies will move into use. However, the ability to increase food production is itself an interesting phenomenon. Coming so soon after a period of food shortages, it suggests that we can be optimistic about our

struggle for food; and it is worthwhile to examine the forces that are responsible for the increased output of farm products in recent years.

World food production in 1954-55, for example, was 20 per cent greater than before World War II. Also, present world population—at about 2.6 billion—is just over 20 per cent greater than pre-war. Thus, food production is keeping pace with population growth. It is significant, however, that while population has been increasing at a fairly uniform rate since the end of the war, total food production for the world as a whole increased at an accelerated rate since 1947-48. Even more significant is the fact that, except for the main Asian countries—the Far East region—, the output of livestock products is from 20 to 50 per cent above the pre-war level.

THE ability of the world's farms to step up production in this fashion suggests that an agricultural revolution is under way. New agricultural technology is bringing about changes in production in all parts of the world, resulting in an increasing output of farm products. Technical changes are reflected in new techniques and methods of production, in larger quantities of outside capital in the

form of machinery, fertilizer, and chemicals used on farms, in the use of better yielding varieties of crops, and in the improvements in breeding and feeding of livestock. These technical changes are the result of man's ingenuity in developing ways and means to increase efficiency in production. Some of these changes are capital-using, and others are factors of production management, depending largely on education and research.

The nature of the agricultural revolution can be seen from some of the most recent statistics published by the Food and Agriculture Organization of the United Nations (FAO). Changes that depend on greater use of capital have taken several forms. In 1953, institutional credit used by the world's farmers amounted to \$17,257.2 million (U.S.). In that year there were 7,505,000 tractors in use, almost three times the number in use before the last war. Commercial fertilizers of all kinds used in 1953-54 amounted to 17 million metric tons,—double the amount used before the war. Pesticides of every description were being used in greater quantities and in more countries as time went on. Flood control and drainage in some parts, and irrigation in others, has added to the total supply of land for food production. While this development has been uneven among countries, considerable achievement is recorded for the last few years. In 1953, the records show a total of 256 million acres under irrigation in the world, exclusive of Russia. This is about twice the acreage under irrigation at the end of the war, with the Far East and Latin America making the greatest progress. Outstanding among the individual countries are India, China, Pakistan, Thailand and Mexico. Russia expects to have an area in excess of 15 million acres irrigated by 1958. This development of irrigation has been continuous, but it made its greatest growth after 1950.

TECHNICAL changes in agriculture have also occurred in methods of crop and livestock production. While some of these are capital using, most of the changes are associated with quality and management of production, and have involved education, research and extension. In the field of crop production it has meant breeding more suitable varieties of crops and getting them into use. In this regard a great deal of credit is due to the international agencies like FAO and to scientists from many countries. Through the efforts of these agencies and the scientists, improved varieties of rice, wheat, barley, corn, sugar cane, cotton and other crops have been developed to better suit the conditions of the countries involved. In the Far East the emphasis has been on rice, wheat and barley. In Latin America it has been on corn, rust-resistant wheat, cotton and sugar cane. In Europe, hybrid corn has been of (Please turn to page 32)



Combines and a wide variety of other new equipment in addition to great advances in farm science and extension have worked together to bring about an unprecedented revolution in world agriculture.



NIGHT WITH NO MOON

Whatever secret Hank Maroni had it was buried in the Sea Queen. The Navy Intelligence wanted a diver to go down and prowl the ship I once owned. Now it looked as if it was my turn to deal—or was I just a sucker taking a long chance in a dangerous game?

by JOHN PATRICK GILLESE

I WAS sitting in Monterey's dingiest waterfront bar, wondering where my next buck was coming from, when I heard the *Sea-Queen* had sunk, taking Hank with her. She'd been coming back from the Gulf of Mexico, when she hit the rocks off Pelican Point. Jim Nooney, who told me, was a good diver—I knew that. Only thing I couldn't figure was why a guy with his reputation would trouble to climb up on the stool next to me.

I could feel him sizing me up, piecing together all the bits he'd heard over six or seven years. "O'Rourke, wasn't the *Sea-Queen* your boat once?"

She was, but I didn't feel like talking about it. To him or anybody else.

"And Hank Maroni? He was your partner . . ."

There wasn't much to say to that any more, either. Funny how the breaks can go against a guy, and he keeps on slipping, right down to his last hope. Then somebody like Nooney comes in and starts talking, and it's like time has turned around—or run out, maybe—and he knows that something's going to happen in the next 48 hours that will change his course for a long time to come.

"Guess you heard," Nooney said, "the Navy wants a diver to go down and look the *Sea-Queen* over?"

I hadn't, but suddenly I was tight inside, like a drum. I tried to keep from showing it. "Me?"

"No," Jim said. "Me." He was looking at me oddly. "I've never been that deep before—maybe no one ever has. They threw down a line. She's 106 fathoms."

It was worth a laugh. "Eighty's as good as suicide! Anyone who'd go down there is crazy."

Jim Nooney nodded soberly. "That's about what I said. They told me you'd gone down almost a hundred once—during the war."

"Who said that?"

"Some Whalen character from the Navy." Nooney went on talking, but I didn't hear. There could only be one Whalen—Old Pop. Hank and I took our

diver's training together, courtesy of Pop and the USN. Pop was so proud of me after that diving job that he took me to his home. Maybe I'd always loved Anita Whalen from the first time Pop showed me her photo, but that night I knew something had happened to me that would never really happen again. We talked the evening away, till Pop got a twinkle in his eye and excused himself to get a cigar. That's when I started figuring the nicest thing that could happen to me would be to have Pop for a real father some day, or at least second-best—a father-in-law. Because I knew Pop never smoked!

From there on, it should have been easy sailing for me. Hank was like the brother I'd never had. When I bought the *Sea-Queen* to go into salvage business, there was only one guy I wanted for a partner. Hank, big, always smiling, always in a sweat shirt. Hank, working his head off over some crazy wreck . . . lying around,

when things were slack, playing his crazy, intricate home-made radio-phonograph, sometimes till moonset on the sea.

Even when he began to get a bad name for sharp deals, queer stunts, I wouldn't listen. I kept getting us business and Hank looked after the books. Trouble was, he kept books too well. He stole the *Sea-Queen*—nice and legal, with his big friendly smile—but he got her. When I walked off the deck for the last time, he was sprawled by the phonograph, listening to his own recordings.

Hi—Nellie! Ho—Nellie!

Ho—the Nellie B!

The smartest ship that ever sailed

The South Pacific Sea . . .

I had to take a last look at him there, wondering if maybe I hadn't made the mistakes. And I had to say good-bye.

Hank didn't bother to turn around. I don't think he even heard me.

IT was the end of a lot of things for me, right down to saying goodbye to Anita. I'd got over missing the boat and bossing my own diving jobs. And with enough tenth-rate jobs and enough cold shoulders from Navy guys you once called friends, you can even get over dreams of making a big comeback some day. But I'd never quite got over Anita.

"Hey, O'Rourke!" Nooney nudged me. "I asked you—would you do it?"

"Eh? Oh!" Maybe some of the bitterness showed in my voice. "Let the Navy do its own stinking diving!" Nooney's eyes were on me as I left the bar and went out into the black spring night, headed for the run-down hotel I called my home in Monterey.

I couldn't walk away from the memories, though. Something funny had gone wrong back there in the past—but what? Everything made sense to a point—Hank's smart deals . . . Frank O'Rourke his partner . . . you couldn't blame people for thinking the two of us had a lot in common. But that didn't explain the way Pop started giving me the thick shoulder. The Navy jobs, the ones they farm out to civilians, were going to other outfits. Of course, with Anita cooling, always on edge when I dated her—well, maybe love is something you can't make to order. That would explain Pop's acting the way he had. If she was your daughter and she didn't know how to go about breaking something up without hurting you too much, maybe you'd cool, too. You could explain it if you tried hard enough, but it didn't help the hurt creeping back, long after I was far away from Monterey.

I'd come and gone with various jobs—everything from shrimp-fishing and skin-diving to salvage work of sorts. I'd heard Hank had made himself a killing, and I'd never expected to run into either Anita or Pop Whalen again. Now I had a strange hunch I would.

Surely Nooney would never dive—50 fathoms is the safety limit. Then who would they ask? Most likely the same lunkhead who'd done that wartime dive. It might cut their pride to do it—but who (Please turn to page 47)



Siddell put a blueprint on the table and said: "If you study it O'Rourke, it'll save time when you're down."

Illustrated by

J. H. Petrie

The B.C. MILK WAR

After 35 years of dissension, milk producers and distributors in the Vancouver area ponder a Royal Commission report described as a text-book for the dairy industry

by C. V. FAULKNER

WE'VE heard of bread wars and beef wars—of hot and cold wars—but out in British Columbia they have a milk war which has persisted, hot or cold, for over 35 years. It has centered around Vancouver City and the Lower Fraser Valley, a 100-mile-long stretch of lush coastal plain that contains about 60 per cent of B.C.'s population, and most of its dairy farms.

It all started over the fact that fluid milk commands a higher price than milk used for manufacturing purposes, which caused a scramble among dairy farmers to get the bulk of their production on the fluid market. Last year the 650,000 people comprising this market consumed 184 million pounds of fluid milk—about half of the total production of the area.

A higher price for fluid milk than for milk used to make butter, cheese, ice cream, milk powder, and other manufactured dairy products, is considered justified on the grounds that it costs more to produce it. Those supplying the fluid market must plan farm economy so production will continue during the winter months when feeding is expensive because of a lack of pasture. Bacteria, which would damage the keeping quality of their product, must be kept to a minimum, a feature not so vital in milk destined for manufacture, which is processed as soon as it is received at the plant.

In the Vancouver area, the cost of producing milk for the fluid market is about one dollar more per hundred-weight than for the manufacturing market. But, unlike other areas, few Valley farmers deliberately produce for the manufacturing trade: their goal is the highest possible percentage of fluid sales. This, in turn, has resulted in the most troublesome fluid milk surplus in Canada, because all of this higher-cost milk that is declared to be "surplus" is diverted to the manufacturing market.

Inequality in sharing the burden of this surplus has been a source of lasting bitterness between the two main groups of contestants, the independent producers and their distributors, and the Fraser Valley Milk Producers' Association. To make matters worse, this inequality was made law by the provincial milk board, in October, 1953, by the introduction of a quota system whereby each producer was permitted to keep the share of the fluid market he held at the time the quota was introduced.

Ironically enough, it was the policies of Vancouver milk dealers back in 1913, which gave birth to the producer-owned F.V.M.P.A. The latter was formed to protect Valley milk producers from the action of distributors who sought to knock the price of milk down, by playing one group of farmers against another. It is now a mammoth milk distribution and manufacturing concern, whose farmer-members (most of them small producers) control 75 per cent of Valley milk production.

On the other hand, independent distributors are supplied by independent dairy farmers (most of them larger producers), many of whom deserted the F.V.M.P.A. so that they could sell a larger percentage of their production on the fluid market. At the present time they are marketing over 80 per cent fluid milk as compared with about 50 per cent for F.V.M.P.A. members. Having limited facilities for manufacture, the independent distributors are also mainly interested in the fluid market; and are thus able to market milk at a far higher rate of return to their producers, than Association members are able to obtain.

F.V.M.P.A. members are particularly bitter about this feature, because they feel that they are actually subsidizing the independents, by taking care of such a large portion of the Valley surplus. Down the years, this feeling has erupted into strongly competitive marketing measures and price wars,—with great loss to the farmers, and little benefit to the consuming public.

During this long struggle, the role of the Provincial Government has varied from that of an innocent, to a not-so-innocent, bystander, and from that of a policeman, to another contestant, none of them very satisfactory to anyone. An attempt on the part of the distributors to bring peace by co-operation, through the formation of a joint distribution agency called Associated Dairies Ltd., proved unsuccessful.

But peace, or more correctly, an armistice, did come with World War II. With the war came Federal control through the Wartime Prices and Trade Board, which fixed the price of milk to both producer and consumer. A strong demand for milk products, plus producer and consumer subsidies, brought a measure of peace and prosperity. At the war's end, control of both prices fell to the newly formed



An aerial view of Sardis district, near Chilliwack, showing the utility plant of the Fraser Valley Milk Producers' Association, and typical Fraser Valley country.

provincial milk board which operated under an amendment to The Public Utilities Act. With the end of the war came a steady drop in the volume of fluid milk sales; and with the increasing surpluses, the marketing war began all over again. The first casualty was the fixed consumer milk price, which distributors got around by various means in an effort to attract customers from each other.

Unable to hang on to the consumer price, the Board was ordered by the Government to let go,—that is, to decontrol all milk prices above the producer level. The Valley farmer would still get his \$5.03 per 100 pounds for fluid milk and \$1.96 per cwt. for the portion used in manufacture. Like any tug-of-war, when you let go of one end, you cause a mix-up at the other, and this case was no exception. A wholesale price war started among distributors, in which special prices were given to institutions and large industrial accounts. Because of high delivery costs, however, the consumer price remained the same. As one small distributor told The Country Guide, "Under decontrol we have jobs, but no return on our investment."

WITHOUT any manufacturing sideline to carry them, independent dealers soon found themselves unable to pay the producer price (\$5.03 per cwt.) set by the Milk Board and still show a profit. Several of them refused to post the bond required by the Board to guarantee payment of this set price, and were threatened with license cancellation. The independents pointed out that the F.V.M.P.A., being producer-owned, was getting by with paying members a "pool" price—a settling rate derived by pooling returns from fluid and manufactured sales. In other words, the pool price was the legitimate return received for their product after the deduction of manufacturing

and handling costs—a sound piece of business, but not in keeping with Board regulations.

At this point, the Milk Board entered the battle, hauling the offenders into court and ordering the F.V.M.P.A. to pay the required fluid milk price. But the Milk Board joined the engagement without checking its ammunition, which proved ineffective for this type of warfare. The charges were dismissed in the courts, and the legality of the Board regulations thrown open to question. New regulations were then rushed through, to put teeth in the Act. Just to make sure that things wouldn't get too quiet on this western milk front, the government tossed in a bomb of its own, by allowing the application of Safeway Stores Ltd. to enter the Vancouver milk distribution field. Then the lid really blew off the top of the bottle! To quote one large distributor, "the government took the fixing of retail milk prices away from the Milk Board and gave it to Safeway Stores."

Safeway immediately announced that it would place paper-cartoned milk in its stores at two cents per quart below the home-delivered price. This, in spite of the fact that cartoned milk costs about two cents per quart more to produce! To meet this competition, other distributors were forced to give a similar deal to the stores they served, with the result that it was no longer possible to pay producers the set Board price. "There's been no real profit in this business in the last three or four years," one independent observed, "but I never saw it as bad as it is today."

In August, 1954, the Milk Board reported to The Hon. W. K. Kiernan, Minister of Agriculture, that the minimum price provisions of the Act were not being observed by any of the milk dealers, co-operatives, associations, and agencies within the Vancouver area. In September, the Lieutenant-

(Please turn to page 52)



Jack Ames lives with progress!

As a Chief Test Engineer of Avro Aircraft Ltd., Jack Ames knows a lot about what lies behind the spectacular progress of the aircraft industry.

"Few people realize what a vast amount of engineering has gone into the development of jet planes," says Mr. Ames. "Improvements in heat-resistant alloys have made it possible to create engines of enormously greater power. Together with advances in airframe configuration and manufacturing techniques, they have brought supersonic speeds within range today—and will help us break the thermal barrier tomorrow."

As a family man, Mr. Ames has had experience with another "industry" that has advanced in modern times... life insurance. Take the group insurance plan in which he shares, for example. Less than a generation ago such plans were almost unknown. Today their benefits are enjoyed by millions and provide a useful supplement to personal insurance programs.

Today, too, all forms of life insurance are more flexible. Result: people now use it for many other purposes than the basic one of protection for the family.

Moreover, life underwriters today are better trained to help people with the task of building tailor-made plans.

In these and other ways, the life insurance companies in Canada have progressed to meet the changing needs of people in all walks of life!

THE LIFE INSURANCE COMPANIES IN CANADA

L-955C

Under the Peace Tower

by HUGH BOYD

TWENTY years ago this month (January 6, to be exact), the present federal minister of agriculture entered Parliament, though he formally became a member of the cabinet a little earlier, on November 4, 1935. There are a few other 20-year men in the Commons, and one other cabinet minister who has held office as long as Mr. J. G. Gardiner. There are a few who came to Ottawa in 1930 or even earlier.

But no one still really active in politics has such a long and unbroken record, if provincial as well as federal affairs be taken into account. Mr. Gardiner, who likes to be precise about some things at least, dates his entry into public life as December 23, 1913, when he received the Liberal nomination in North Qu'Appelle. The by-election which he contested was not held until June 25 of the following year, but he had already been campaigning, and so it may be said with some accuracy that Mr. Gardiner has now been continuously in the public eye for just over 42 years.

In all that time he has been elected on 12 occasions, including two acclamations. One of his successes—in 1945—was a narrow squeak, but the record remains unbroken. But the only two reverses of his career were major: the first, when a coalition of anti-Liberals defeated his government on the floor of the Saskatchewan legislature in September, 1929; the second, when the 1948 national convention preferred Louis St. Laurent to himself as leader of the party.

Ottawa has come to regard Mr. Gardiner as politically indestructible, and almost physically so as well. There is still little speculation as to who his successor in the cabinet might be, eventually.

The years may have mellowed him a bit, and his pace may be rather more deliberate, yet few smile when they recall his promise in the summer of 1948 to be the Liberal party's spark-plug, if he couldn't be its leader, because he retains a quite potent political wallop. Many a man a generation younger might envy him his energy, and also his almost uncanny ability to keep out of serious trouble most of the time.

He has always been a center of controversy, and no doubt will continue so until the end of his career. It is doubtful whether he pleased everyone at the federal-provincial agricultural conference here last month; yet some other man in his position might have pleased them still less, because that other man might not have been able to persuade the cabinet to go as far as it has gone, in some important aspects of national farm policy—continuance of the free freight program on feed grains, for example.

Mr. Gardiner still manages to extricate himself from a potentially embarrassing position with some agility. There was that matter of New Zealand and butter the other day. New Zealand was reported to have protested that Canada was unloading



surplus butter in some European markets to New Zealand's disadvantage; that Canada was really following the same practices it objected to so strenuously when carried out by the United States, in the case of wheat.

THE minister of agriculture has tened to explain. New Zealand hadn't protested. It had merely drawn to Canada's attention the fact that Czechoslovakia, where a relatively small amount of surplus butter had been sold last summer, is one of New Zealand's regular customers. It wasn't concerned about Eastern Germany, where much larger sales have been made, because Eastern Germany was not a regular customer. The Canadian government had not realized the position in Czechoslovakia, and would keep out of there in future, in connection with the present disposal program. As to discrepancies in price, Mr. Gardiner said the two products were not quite comparable, the New Zealand article being from current production and the Canadian from 1954 stocks, salted; anyway, the European customers wouldn't pay any more for a kind of product with which they were unfamiliar, though maybe they would raise their sights a little, when they came to know and like it better.

At the new session of Parliament, the minister can be expected to defend his butter policy to those who remain skeptical; and unless he is much below form, he is likely to leave the critics groping with a pile of statistics and not quite sure of themselves.

For he has always been the most difficult debater to pin down. "Like picking up quicksilver with a fork," once complained the exasperated Mr. J. G. Diefenbaker from the same province of Saskatchewan.

Just the same, few even of his political adversaries would be happy to see Mr. Gardiner make an exit from the House of Commons. It would be a considerably more prosaic place without him.

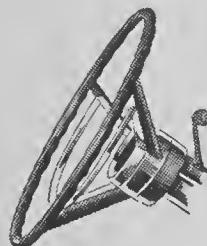
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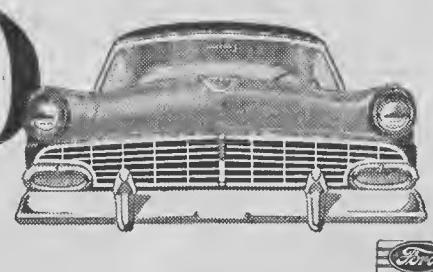
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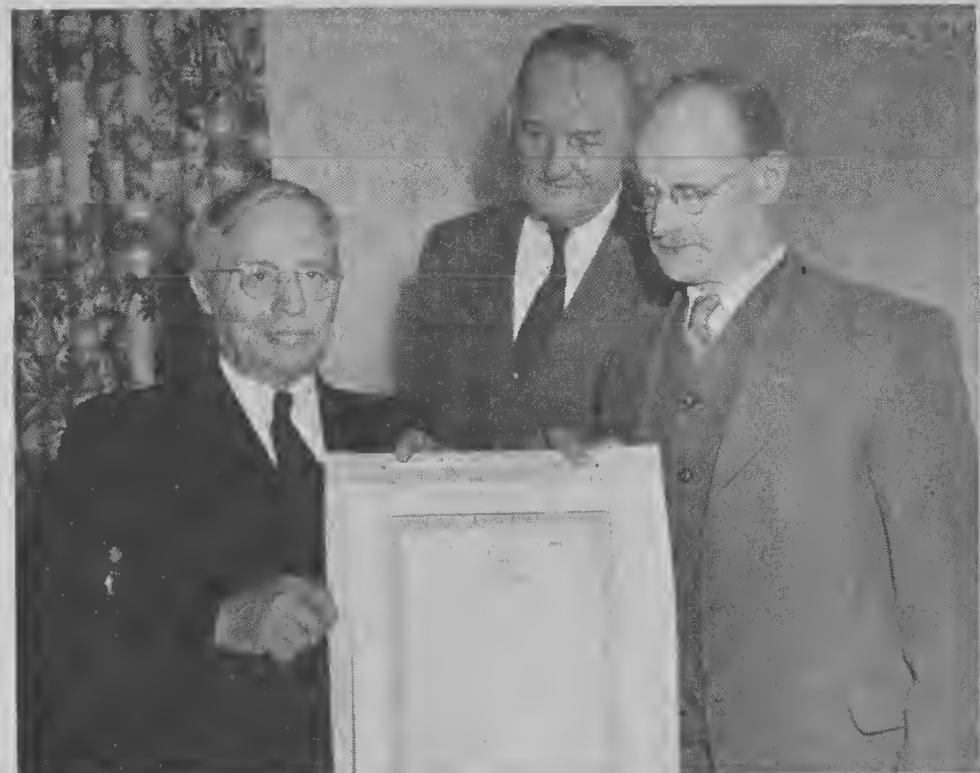
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NEWS OF AGRICULTURE



Rt. Hon. J. G. Gardiner hands an award to S. E. Halksworth, president, Vernon dairy co-op, B.C., for shipping milk to Europe. Mayor A. C. Wilde looks on.

Long Distance Milk Shipping Record

THE world record for long distance shipping of fresh milk is claimed by a dairy in British Columbia. It happened last spring, when the Penticton V's were playing in the World Hockey Championships, which they won. There is no proof, but their victory may have been due to the fresh milk that was shipped to them daily from Vernon, B.C., to Dusseldorf, Germany, by the Shuswap Okanagan Dairy Industries Co-operative Association.

Impressed by this feat, the City of Vernon and the Board of Trade of Vernon had an illuminated address inscribed for the dairy farmers' co-op, and arranged for a formal presentation recently. The Rt. Hon. James G. Gardiner, Federal Minister of Agriculture, handed the address to S. E. Halksworth, president of the co-op, in the presence of Mayor A. C. Wilde of Vernon.

kernel weight. The Board of Grain Commissioners' Laboratory reports that the bushel weight of the new crop is higher, clean-out losses are lower, and malt extract is higher than the previous year.

The 1955 barley crop is estimated at 244 million bushels, compared with 167 million bushels in 1954. During the first quarter of the new crop year, 53 per cent of the carlots inspected entered malting grades, and 18 per cent was graded No. 1 feed.

A survey of 1,827 samples of six-row grades and No. 1 feed from 769 shipping points in western Canada shows a mean protein content of 11 per cent. Protein levels for the provinces are: Manitoba 11.2 per cent, Saskatchewan 11 per cent, and Alberta 10.9 per cent.

Seed Growers' Secretary Honored



[Paul Horsdal photo]

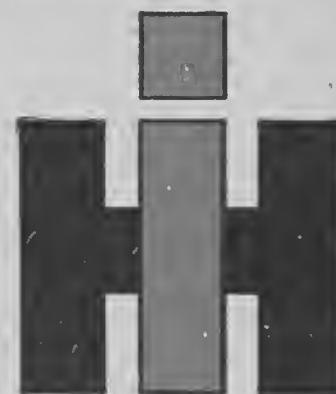
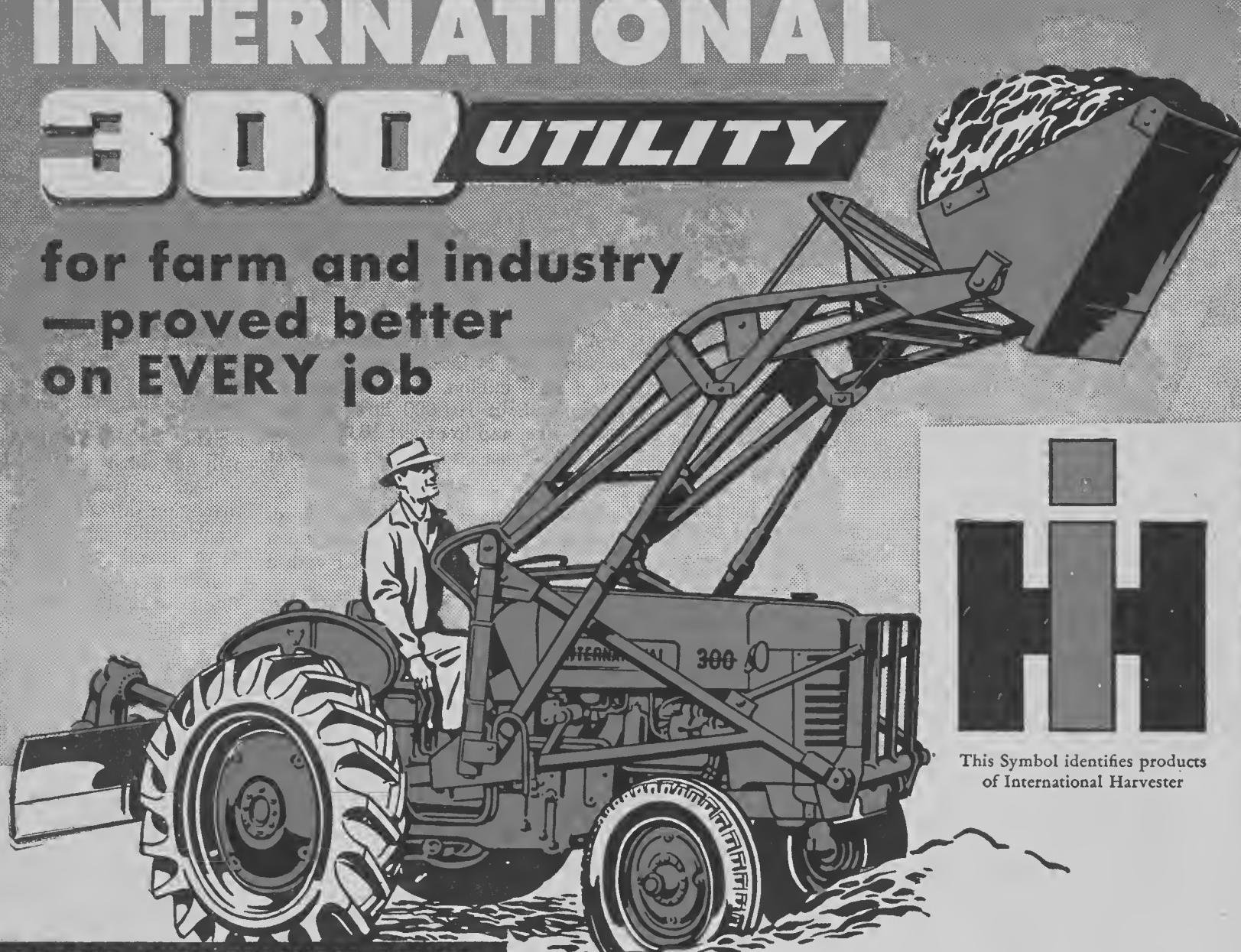
THE International Crop Improvement Association, at its last annual meeting, conferred an honorary life membership on W. T. G. Wiener, who has been secretary-treasurer of the Canadian Seed Growers' Association since 1928. The award was made "in recognition of outstanding service to the Association and to the agriculture of Canada and United States."

Better Barley In the 1955 Crop

MALTING quality of the 1955 barley crop is higher than in 1954, but similar in nitrogen content and

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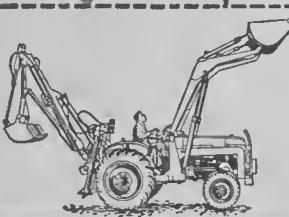
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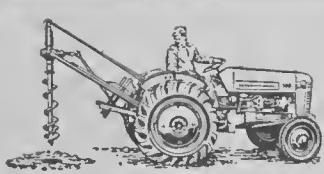
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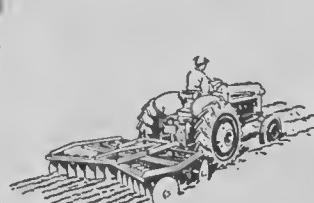
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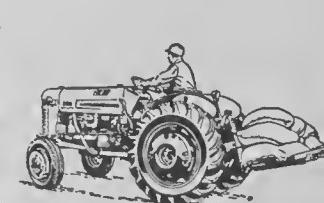
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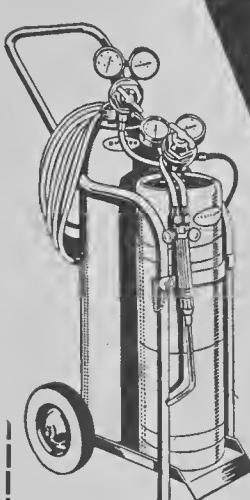
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NEWS OF AGRICULTURE

Get It At a Glance

World round-up of farm activities presented in brief

Export sales of purebred Holstein cattle from Canada increased 25 per cent during the first 11 months of 1955, compared with the same period in 1954; 16,738 head were sold to 14 countries, and 93 per cent of those went to the United States. ✓

Dutch dairies are attempting to store milk fat in the form of frozen cream, instead of cold storage butter, and to convert the cream to butter as it is needed. Butter from frozen cream is reported to be equal in flavor to fresh butter, higher in vitamin A, and better in spreading quality. ✓

A foot-and-mouth disease institute is being built in Indonesia at a cost of about \$2.6 million. It is expected to produce about 104,000 litres of vaccine a year, and to export 16,000 litres of this to other countries in Southeast Asia. ✓

Dairy Farmers of Canada, representing 455,000 producers, will open their sales promotion this year with a concentrated milk products campaign. Their slogan is: "With a package of milk powder on the shelf, you'll never face a 'no milk' crisis." ✓

Hog population in England and Wales decreased by 795,000 (14 per cent) in 1955. Cattle totalled 8,153,000, an increase of one per cent, and sheep increased six per cent to 753,000. ✓

Study of antibiotics used for the care and treatment of cattle has been requested by the International Association of Milk and Food Sanitarians, in the interests of public health. They urge governments to enact and enforce laws aimed at eliminating milk supplies containing significant quantities of antibiotics. ✓

Final payment on the 1954-55 oats crop, announced by the Canadian Wheat Board, averaged 5.432 cents a bushel. Total prices under the year's pool averaged six cents a bushel higher than the previous year. ✓

American hog producers have been asked to consider a voluntary cut-back in spring production. Secretary of Agriculture Ezra Benson said it would relieve marketing difficulties next fall, such as had been experienced in 1955 owing to heavy production. ✓

Started less than ten years ago, the Oxford and District Cattle Breeding Association of Ontario is the largest artificial breeding association in Canada; 57,556 animals were bred by the association during 1955 in the counties of Oxford, Perth, Elgin, Norfolk, Brant, Middlesex and Kent. ✓

Butterfat production in New Zealand in 1954-55 was the second highest on record. It totalled 509,300,000 pounds compared with 500,000,000 in 1953-54. ✓

Prevent cream from freezing, says the Alberta Department of Agriculture, by keeping cans in cold water in

a protected tank on the farm. Make sure trucks are suitable for winter transport, and do not leave cans of cream long in the open awaiting rail transport. ✓

Eggs without shells will be sold in 12-compartment polyethylene packets in the United States. The idea, developed at Cornell University, is to eliminate inaccurate grading, lower cost, keep them fresh longer, and to find a market for pee-wee eggs by putting two into a compartment. ✓

A free booklet, published by the governments of the three prairie provinces and the Central Mortgage and Housing Corporation, explains how to install water and sewage systems for farm dwellings. ✓

The United Kingdom government will get out of the bacon business in a year or two, said J. G. Clarfelt, managing director of the British Fatstock Marketing Corporation, in Ottawa recently. If that happened, and dollars were available, his co-operative would buy from Canada, he added. ✓

Total loans since the first Credit Union in Saskatchewan was organized in 1937 rose to \$109,813,273 last year. There are now 280 credit unions and 80,500 members in the province. ✓

Lycopodium, a small plant used in wreaths, table decorations, corsages and sprays, makes an average of \$200 each spring and fall for residents of Phelps Township, Ont., who pick it and ship it to processors. ✓

Hog prices, which fell 10 to 20 per cent in France during 1955, are to be supported by the French Government. The price support range is from 37.6 cents a pound to 42.8 cents a pound, and if the price should fall below the minimum, a semi-official agency will buy for freezing. ✓

Alfred Erdman, of Barons, Alta., who won the world durum wheat championship at the Chicago Hay and Grain Show recently, had never entered a grain competition before in his life. ✓

Montvic Colleen Abbekerke, a purebred Holstein owned by J. J. E. McCague, Alliston, Ont., has become the leading living lifetime producer of butterfat in Canada. She has produced 203,340 pounds of milk, containing 8,872 pounds butterfat, in nine lactations. ✓

All varieties of apples are being permitted to enter Sweden from the dollar area. The government order came into effect January 1. ✓

Egg cartons that are provided with windows so housewives can see what they're buying have a greater sales appeal than the closed kind. In a recent test by Cornell University it was found that the carton with the biggest window sold more per 100 customers than any other kind. ✓

LIVESTOCK



Guide photo
Part of the pole barn and milking house built at a cost of \$5,000 by Bill Robertson on his Ontario farm at Auburn, after fire razed the old housing.

Replacement For Burned Barn

BILL ROBERTSON hadn't been on his farm at Auburn, near Goderich, Ontario, a year—just long enough to convert the old stanchion barn to a loafing barn and set up a milking parlor—when it burned to the ground. That kind of happening might stun some people into inaction, but Bill enlisted aid from his dad and brother down the road. He moved his herd of Jerseys to their farm, and within days, was building a pole barn and milking house around the ruins.

First came the milking parlor, a 30 by 40-foot structure, half of which is given over to a loafing area. This, like the pole barn, was built to a commercial plan, with concrete walls halfway up, and the rest steel. It included a cooling tank for milk, and a three-unit parlor. Here Bill saved some expense by taking hand-welded milking stalls from an unused barn on his brother's farm.

The pole barn, set 100 feet away from the milking parlor, was made 104 by 52 feet, large enough for hay and straw storage at the back. The poles are on 13-foot centers, but trusses were used on the roof along the back, because a row of poles was omitted there.

With this arrangement (cost of materials for both buildings was about \$5,000) he plans to milk 30 Jerseys. Later, he can add more beef cattle, and handle them in the same barn. ▽

Don't Encourage Animal Diseases

PREVENTION of disease is a very important part of good livestock management. Although poor management may not actually cause disease, it leaves animals weakened and more liable to get sick.

On a fine and sunny spring day, a farmer left all the doors of his pig barn open and went to town. The temperature dropped while he was away, and five of his pigs had pneumonia by the following day. Quoting this example, Dr. E. E. Ballantyne, director, Alberta Veterinary Services Branch, says that the most common poor management practice is failure to provide a dry sleeping area. Ani-

mals can stand a lot of cold, but not a combination of cold and damp.

Sudden changes in feed, water, or surroundings can weaken resistance to disease. Shipping fever often develops when calves are weaned or feeders are brought back to the feedlot. It will help if they are fed native grasses for a week, and the chill is taken off their drinking water. Germs, viruses and parasites thrive on filth, and sanitation is one of the main weapons against disease.

Poor feeding, too, can let bacteria get the upper hand and kill an animal. Too much fibre in feed for small pigs leaves them open to scours, lack of vitamins A or D causes sickness, and if little pigs do not have reduced iron they will get anemia, and may be finished off by scours or pneumonia.

The picture presented by animal diseases is a frightening one, but there are agricultural representatives, veterinarians and many others ready and able to advise on good management. ▽

Winter Feed For Pregnant Cows

ALTHOUGH grass silage is satisfactory for wintering pregnant beef cows, better results are obtained when hay is added to the silage ration. This is the conclusion drawn from trials at the Central Experimental Farm, Ottawa, over a two-year period.

One group was fed grass silage, another grass silage and hay, and a third corn silage and hay. Both the hay and grass silage were a mixture of legumes and grasses, and the rations were adjusted so that each group had the same amount of dry matter daily. The grass silage contained 80.4 per cent moisture, and the corn silage 82.7 per cent.

The cows fed grass silage lost 44 pounds per head from December up to calving, those on grass silage and hay lost 32 pounds, and those on corn silage and hay maintained their weight. There were no differences between the average birth weights and vigor of calves from three rations, and no major significance was attached to the loss of weight, which was recovered when the cows had ample pasture in the summer and fall.

However, the daily feed consumption of grass silage alone was 82



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LIVESTOCK

pounds, compared with 42 and 10 pounds of grass silage and hay respectively, and 44 and 10 pounds of corn silage and hay.

For farmers who keep sheep as well as cattle, the Experimental Farm, Nappan, N.S., has made tests with grass silage which indicate that it can be used as the sole roughage allowance for pregnant ewes. Ewes wintered on grass silage and a small grain allowance, did as well as those receiving hay as the only roughage, combined with the same small grain ration. The trials were based on maintenance of body weight, lamb weight, vigor at birth and lamb gains to 28 days of age. V

Keeping Parasites Off Cattle

DIRT and bad ventilation encourage cattle parasites, but even in clean conditions, cattle are likely to become infested unless they are protected. There are four ways of treating them—dipping, spraying, washing and dusting—and the method depends upon the kind of cattle to be treated, the insecticide used, and housing conditions.

Dipping and spraying are most effective, but dusting and washing are practical methods when only a few animals have to be treated, according to the Experimental Farm, Lennoxville, Quebec. Treatments are most effective when applied in the fall, to prevent the build-up of parasites, but it is better to treat them later than not at all. Treatments should be given with an interval of 12 to 16 days.

Some insecticides are poisonous, and should not be used on cows being milked or beef animals just before marketing. Small quantities of insecticide are absorbed by the skin, and pass into the tissues of the animal, and even into the milk.

A water suspension of Methoxychlor or Rotenone is recommended for dairy cattle in production. Lindane, DDT, BHC or Toxaphene are effective for beef cattle and non-milking dairy cattle. If instructions on containers are not too clear, cattlemen should check with the local agricultural representatives for advice on their spraying programs. V

Bang's Disease Can Be Bought

MOST cattle losses from Bang's disease in Alberta are due to lack of care when buying additions to the herd, according to Dr. E. E. Ballantyne, director of the Veterinary Services Branch, Alberta Department of Agriculture.

Advising farmers to raise their own herd replacements, or to buy only vaccinated animals, or calves that can be vaccinated, Dr. Ballantyne says that a survey in Alberta showed that the abortion rate in non-vaccinated cows was 30 per cent, and six per cent in vaccines, where all were exposed equally to infection. But some of the abortions in vaccines were due to vibrio infection.

Vaccination of calves does not interfere with breeding efficiency, and

if cattlemen have difficulty in getting vaccines to calf, examination by a veterinarian may show that the trouble is vibrio infection, lack of phosphorus, or some other condition. V

Simple Winter Housing for Cattle

TEMPORARY winter shelters for cattle need not cost a lot of money. The Ontario Department of Agriculture recommends a structure of posts covered with straw. The posts should be strong enough to bear the weight of straw, and the structure should be at least nine feet high, allowing plenty of clearance above the cattle. It should also be open to the south, if possible.

The straw can be laid over the frame like a stack, or placed around and over it in bales, two or three layers deep. When using baled straw, poor quality hay on top of the roof will help to keep the rain out. V

Hog Feed With Antibiotics

ANTIBIOTICS and high protein feed are not necessarily the best combination in feeding hogs. In terms of rate of gain and feed efficiency, the Experimental Farm, Melfort, Sask., found that a medium protein ration with an antibiotic showed more striking results.

In trials with 104 hogs, a ration containing from 13 to 19 per cent protein was fed from weaning to 70 pounds, 12 to 15 per cent from 70 to 130 pounds, and 11 to 13 per cent from 130 to 200 pounds. Each ration was fed with and without aureomycin.

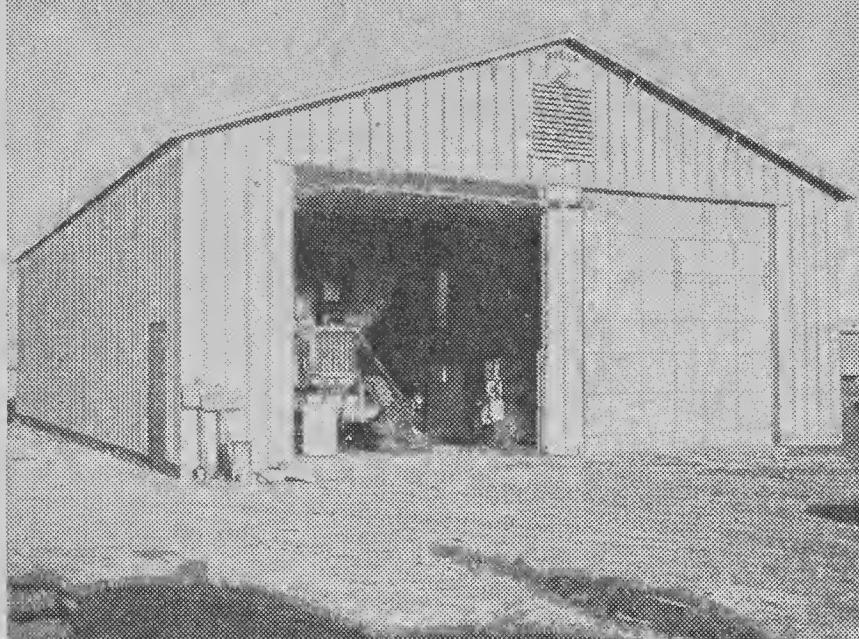
Over the entire period, the addition of aureomycin increased the rate of gain by 4.4 to 13.1 per cent, increased feed efficiency by 4 to 8.6 per cent, and reduced feed cost per pound of gain by 2.4 to 4.2 per cent, depending on the level of protein in the ration.

Where there was no aureomycin, there was a difference in average daily gain per hog of .15 pound between the low and high protein rations. Hogs on the high protein ration needed .28 pound less feed to put on a pound gain, compared with hogs fed the low protein ration. However, this increase in feed efficiency was offset by the higher cost of the higher protein ration, with the result that gains on the low protein cost 1.2 cents less per pound. The same trend was found in rations containing aureomycin. V

Limitations In Sheep Breeding

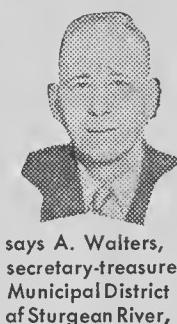
AYEARLING or older ram in good condition can breed up to 40 ewes, but not more. Art Pope, sheep specialist, University of Wisconsin, emphasizes the need for care in breeding. A purebred ram lamb, weighing less than 125 pounds cannot serve more than 20 ewes, and if farmers want to make a profit from their lamb crop, they should not disregard a ram's limitations.

Ewe lambs, weighing 100 pounds, can be used for breeding, if they have extra feed and attention. V



Butler rigid frame, all-steel construction is wind and weather-safe, fire-safe, amply supports track frames for lifts and haists. Clear-span interiors make every cubic foot of space usable.

"Here's why our 5 farmer-councillors chose a BUTLER steel building for our road machinery garage"



says A. Walters,
secretary-treasurer,
Municipal District
of Sturgeon River,
Alberta

"The five farmers on our municipal district board of councillors are pretty shrewd buyers. They want full value for every penny of tax money spent," says Mr. Walters.

"So—when we were deciding on a new building for a machine shop, for repairing our road construction and maintenance machinery, we considered all kinds.

"We chose a 40x60-foot Butler building because we found it would be quick and easy to erect, would require little or no maintenance, and could be equipped inside just the way we wanted it.

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See your Butler Builder about a Butler steel building for your needs, whether it's for your rural municipality's road machinery storage or service—or for your own farm, for machinery and grain storage, livestock shelter, or a combination utility building for all-around use. Ask your Butler Builder for your free copy of Butler's new catalog: "New Uses for Butler Steel Buildings." There's a Butler Builder near you. See list below.

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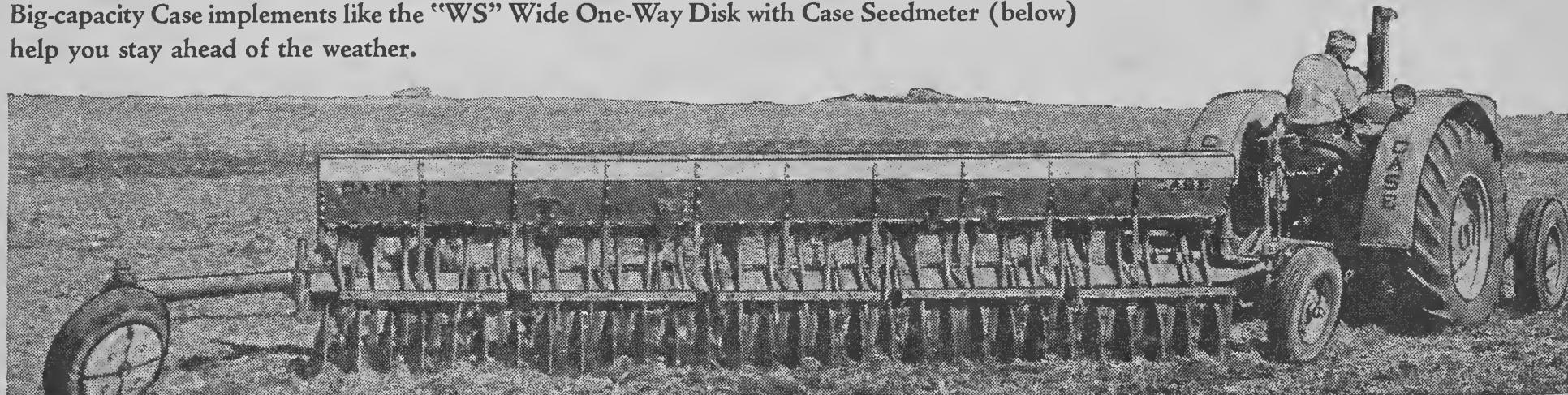
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"500"



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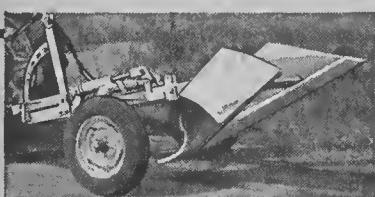
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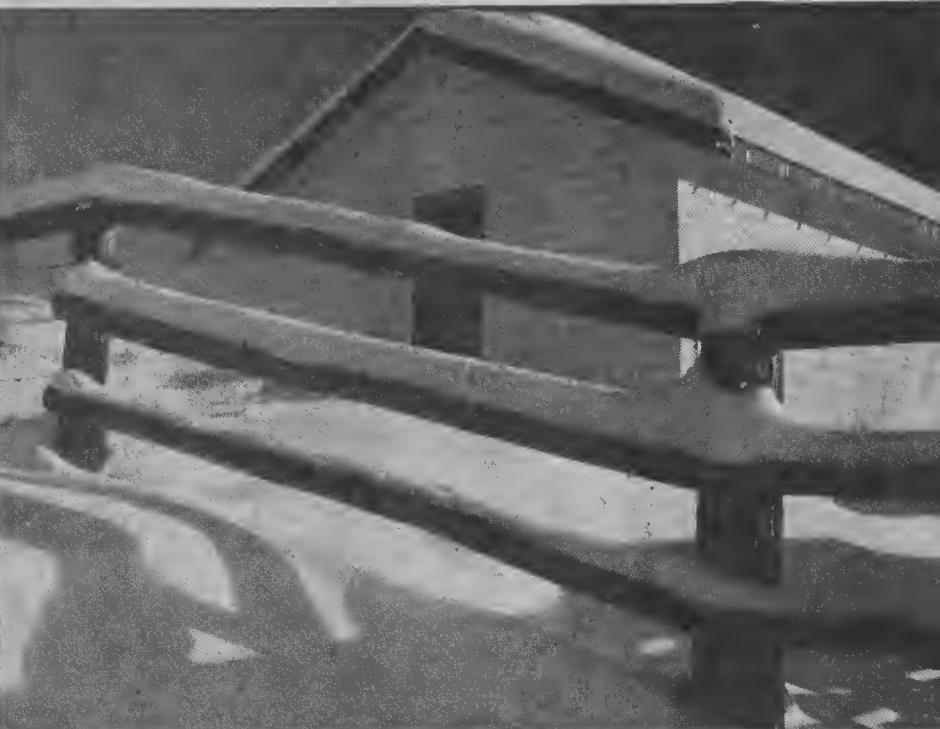
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(Bert T. Smith photo)

This attractive winter study in black and white also serves to illustrate the importance of maintaining good fencing on the farm for all weathers.

Barley Marches On

GOOD progress was made last year in the development of new malting barley at the University of Manitoba and the Experimental Farm, Brandon, Man. Although it is very difficult to produce a new variety, both now have varieties in the final year of testing, but none will be released unless it meets exacting field and laboratory tests.

It was at Brandon that W. H. Johnston and D. Metcalfe produced the new feed barley called Vantmore, which has proved superior to Vantage in Manitoba, and was first distributed for commercial production last fall. The demand was so great that stocks were quickly depleted.

Another newly licensed variety is a winter barley, named Hudson, from New York State. It has proved superior to Wong, Tennessee Winter and Kenate, but it is only winter hardy enough to be grown in southwestern Ontario.

Plant breeders are very interested in some European two-row varieties, a few of which are in their final year of testing in Canada. Work is also in progress to breed resistant varieties for the smuts and leaf diseases, such as septoria blight, net blotch, spot blotch and scald. If aphids persist, there may well be an attempt to breed varieties resistant to them, too.

There is no end to the work that must be done, but plant breeders, plant pathologists and entomologists have already made some remarkable improvements in Canadian barley varieties over the past few years. V

Sowing Weeds On Alberta Farms

ALBERTA farmers plant 12 million acres of cereal crops each year, using 18 million bushels of seed grain. In the spring of 1955, at least six million bushels of the seed used was of inferior quality, and would have been rejected for seed under the grading system of the Canada Seed Act.

Robert L. Pharis, supervisor of the Alberta Crop Improvement Service, who bases this disturbing statement

on a survey, has something even more alarming to say. The average weed seed content of rejected grain sown in 1955 was 60 wild oats and 64 wild buckwheat per pound. In addition, the seed of stinkweed, mustard, Russian pigweed, hemp nettle and others was present.

The cost of cleaning the weed seed from the polluted grain would have been 6 to 10 cents a bushel, or 10 to 15 cents an acre. But this is nothing compared with the cost every year of killing the weeds planted with seed grain, including the cost of reduced yields and grades, chemical sprays, and other weed control measures. This is a clear case where a few cents spent on seed would mean dollars gained at harvest time. V

Getting Corn Increases

THE effect of fertilizer on corn depends largely on the population of the corn stand. The population of corn varies from one area to another, but for western Ontario stands of 14,000 to 16,000 plants per acre are recommended by the Ontario Department of Agriculture, and 18,000 plants per acre are suitable for the eastern part of the province.

In these areas, when corn follows a well-manured clover sod, fertilizer high in phosphate and potash should be applied at 300 to 400 pounds an acre, depending on population. If there has not been any manured clover before the corn, fairly large amounts of nitrogen must be added to get significant increases in yield. Apply fertilizer at 300 to 600 pounds an acre, plus 30 to 60 pounds of nitrogen (100 to 200 pounds of ammonium nitrate or its equivalent) either before planting or as a side dressing when the corn is six to 12 inches high.

When using large amounts of fertilizer, the application should be split and the bulk plowed under or disked in. To make sure that most of the fertilizer goes deep enough to take advantage of moisture, it may be advisable to broadcast it and plow under, drill it into the soil with the grain drill before planting the corn, or to apply the potash and phosphorus before plowing in the fall. V

Kochia May Be New Forage Crop

WHEN is a weed not a weed? An example of the fine line dividing weeds and crops can be found at the Field Husbandry Department, University of Saskatchewan, where experiments are being carried out with a weed named Kochia. It is believed that Kochia, a big, bushy plant, with small leaves and a coarse stem, has a future as a forage crop, and varieties with low ash content are being selected.

Kochia, also known as Mexican Burning Bush, is a dry-weather plant found in Colorado and South Dakota. It could, perhaps, replace oats eventually as a forage crop; and although it has not been tested against alfalfa, its average yield is at least as good. However, it will be three or four years before the selection and testing of Kochia is completed.

Wild oats are also having special attention in the Field Husbandry Department, where a study of their dormancy is being made. So little is known about the dormancy of wild oats, that a thorough investigation of it may provide a new approach to chemical control. V

Winter Cereals In Western N.S.

NOVA SCOTIA has wintered cereals with little or no damage in the western part of the province during recent years, and they have given yields comparable to the spring-seeded cereals.

One advantage of winter cereals, says G. G. Smeltzer of the Experimental Farm, Kentville, N.S., is that they help to check erosion, which is one of the more serious farm problems in that area. Annual weeds are also less of a problem than with spring-seeded cereals, and fall planting comes at a time when farm help is more plentiful.

Fall-seeded varieties of wheat and rye have given good yields at all locations on test, but this has not been the case with winter barley. Six varieties of winter wheat yielded 40 bushels per acre, with the exception of Kharkov, which averaged 20 bushels. Fall rye averaged 47 to 72 bushels per acre, with Dominant in the lead.

At Kentville, Kenate barley yielded 46 bushels per acre and Wong 26 bushels, but outside the Annapolis Valley yields have been much lower. Present varieties are not expected to survive severe winters. V

Fit Tractor To Your Needs

A DIESEL tractor used for 500 hours a year, or more, will take care of the higher original cost by fuel savings over five to six years. When fewer hours are worked in a season, the high-compression gasoline tractor is more suitable, according to the Experimental Farm, Swift Current, Sask.

It is important to consider size when buying a tractor. If possible, it should be chosen so that its normal load will be close to the rated load, and not to the maximum load figure. Too much or too little power make an uneconomical power unit. Horsepower for

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hilly or soft conditions should be increased about 25 per cent to give adequate power.

The Nebraska test ratings can be obtained from the Experimental Farm, Swift Current. ✓

Shelterbelts For Conservation

As an example of good conservation, the North Dakota Extension Service quotes the case of Albert Hornung, who farms 258 acres at Walhalla. He has reduced soil losses from wind erosion, with field shelterbelts, which run north and south, and are set 40 rods apart.

In co-operation with the West Pembina Soil Conservation District, Mr. Hornung has planted three-row buffer strips, totalling four miles, in the past four years. Strip-cropping at 10-rod spacing, and a soil conservation crop rotation with alfalfa on 30 per cent of his crop land, have also helped to keep the soil from blowing. He plows the alfalfa down in the third year, and has good results from cover crops and stubble mulch tillage. ✓

Rust-Resistant Soft Spring Wheat

Some progress in developing rust-resistant strains of soft spring wheat is reported by Alicia Wall, cerealist, Experimental Farm, Lethbridge, Alta. She says that no variety is entirely resistant to stem or leaf rust, but the severe rust epidemic of 1954 showed that some of the new lines out-yielded Lemhi, which is presently the most common variety grown in Alberta.

One requirement of soft wheat, however, is that it should be low in protein. Some of the new strains resulting from crosses with hard red spring wheats to give them rust-resistance had to be discarded, because the high protein of hard wheat was transmitted to them. Lemhi also has a relatively high protein average of 10 to 11 per cent.

In spite of this, it is believed that a soft white spring wheat can be developed for certain areas in Alberta, with high rust-resistance, low protein, early maturity, and strong straw. ✓

Manure For Potato Crop

At one time, fertility for the potato crop was supplied by stable manure, which helped to keep organic matter in the soil. But when commercial fertilizers appeared, and many farmers eliminated stable manure from the fertility program, there was a danger of exhausting the organic matter in the soil.

Tests carried out by W. N. Black, agronomist at the Experimental Farm, Charlottetown, P.E.I., have shown that the most economical returns come by applying manure supplemented with 5-10-10 commercial fertilizer. An average yield of 367 bushels of potatoes an acre followed the application of about ten tons of manure and 1,500 pounds of 5-10-10 per acre. This was 13 bushels per acre more than the plots receiving 2,500 pounds of fertilizer alone. ✓

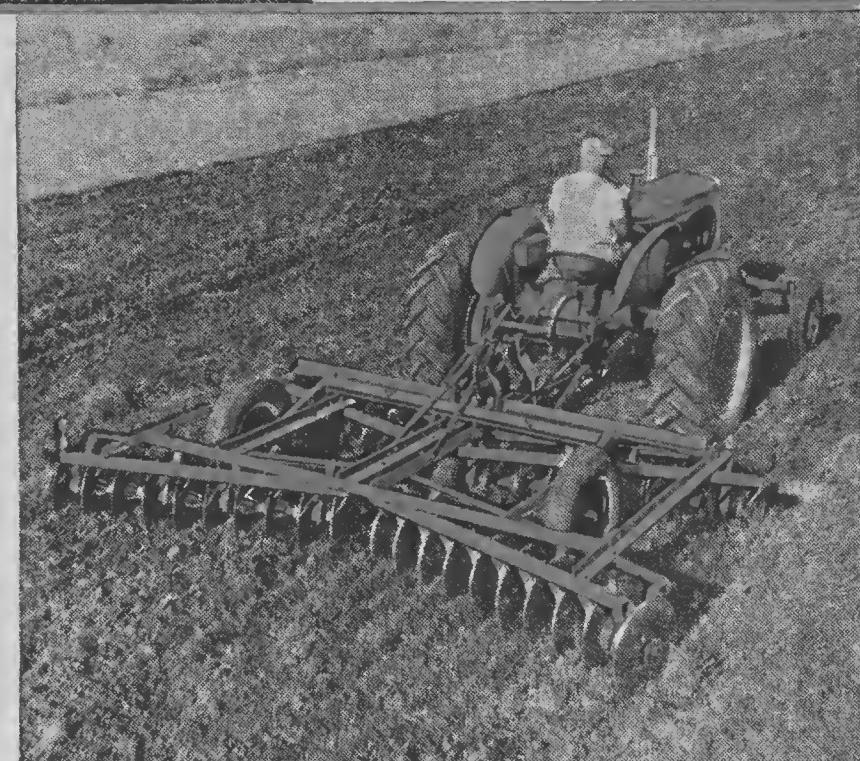


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HORTICULTURE



Pruning the vineyard, or grapery, is a winter job, which, for best results, requires skill. Here art and science meet, but nature determines the result.

Guard Early Against Sunscald

IT may be a little early, in most parts of Canada, to warn owners of fruit trees and recently planted ornamental trees with smooth bark, against the danger of sunscald. Nevertheless, protection can be given them any time, and the life of trees that will ultimately be valuable will be saved.

Sunscald occurs in the early spring, or late winter, when the sides of the trees nearest the sun may thaw in the daytime and freeze at night on successive occasions. If this happens many times, the bark on that side of the tree dries out and cracks. A dead spot develops and the tree may eventually die.

To guard against this danger provide some kind of shade for that side of the tree during the danger period. This may mean merely leaning a board against the tree, or wrapping it loosely with cardboard. Long hay tied against that side of the tree will also serve, though it is perhaps less desirable for other reasons. Whatever the method used, the precaution can be taken any time.

can only be secured from the dwarf trees "if the trees are grown on good soils, cultivated, pruned lightly, and given the very best of cultural care."

The amount of dwarfing depends on the kind of root stocks used when the trees are grafted in the nursery. Those used on the continent of Europe and in England are known as the Paradise dwarfing stocks. There were so many strains and varieties of these, representing so many degrees of dwarfing, that about 40 years ago the East Malling Research Station in England collected many of them and classified them according to the degree of dwarfing they produced. Later a series of East Malling dwarfing root stocks was numbered from I to XVIII. Of these, about eight are most commonly used. Numbers VIII and IX are dwarfing, numbers IV and VII semi-dwarfing, numbers I and II semi-standard and numbers XIII and XVI standard. For planting, dwarf stocks should be set about 8 by 15 feet, semi-dwarfs about 17 by 17 feet, semi-standards about 20 by 20 feet, and standard trees about 30 by 30 feet or more.

Measuring the Color of Vegetables

IN England and continental Europe, dwarf apple trees have been grown for hundreds of years. Not many such trees have been grown commercially in North America, but recently, growers have become more interested in dwarf, semi-dwarf and semi-standard trees, according to Dr. C. B. Fisher, Experimental Farm, Summerland, B.C.

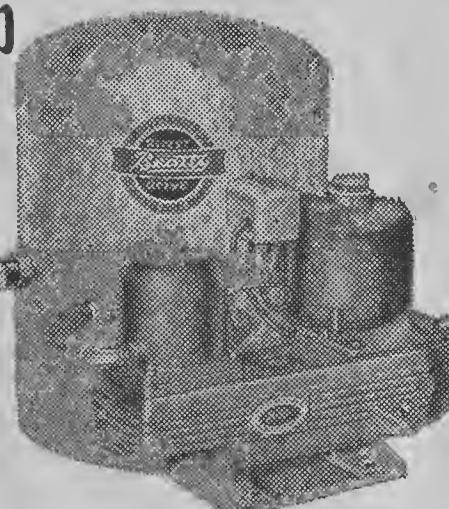
Dwarf trees have certain advantages, among which is the fact that they tend to produce more heavily in the earlier years after planting, whereas standard trees may be 10 or 12 years old before they produce profitable crops. In addition to yield, of course, the smaller trees are easier to prune, spray, thin, and pick, which means a saving in time and labor.

There is little to choose between dwarf, semi-dwarf, semi-standard or standard trees as far as yield is concerned, after they have reached full bearing. Given the necessary care suitable to each type of tree, the yield per acre should be about the same. However, Dr. Fisher warns that increased production in the early years

Special instruments for color measurement mean that plant breeders working for better and newer varieties of vegetables now have another tool available which will tend to shorten the time required. The practicability of measuring even slight color variations means that plants with richer-colored fruits can be selected more accurately for the transmission of this quality to new and better varieties.

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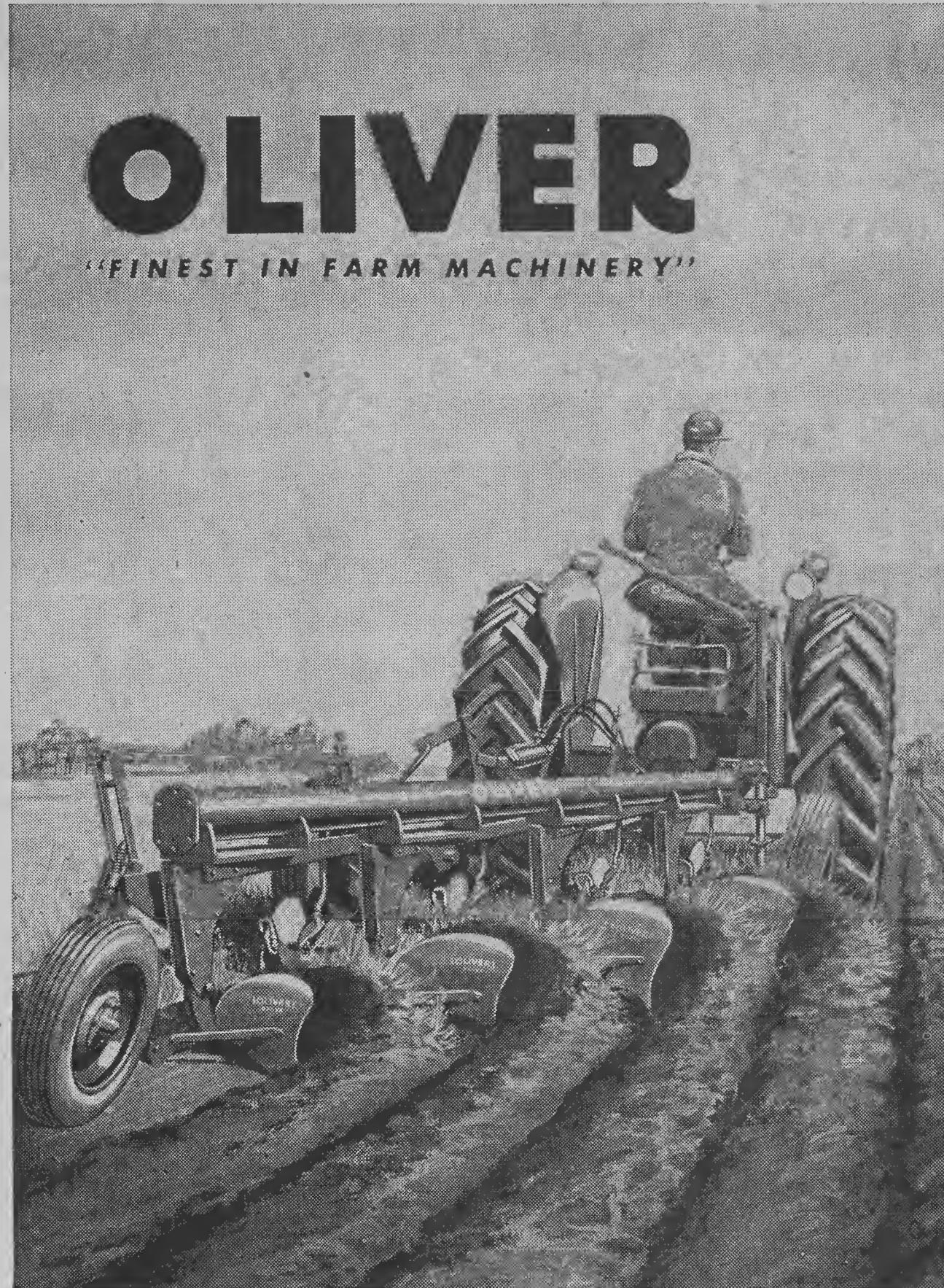
Potato growers, who are often up against difficult marketing situations, may achieve wider markets for their potatoes through the sale of new products such as potato flakes, potato puffs and potato chip bars. All three new potato products have been developed at U.S.D.A. regional laboratories in Pennsylvania and California. Potato flakes are dehydrated mashed potatoes, which are said to taste something like a baked potato, after milk or hot water is added and the combination whipped. The potato-chip bar is a high-calorie, high-density product with taste appeal, which takes up only one twentieth the space needed for an equal amount of ordinary potato chips. Potato puffs are fat-free, pillow-shaped, and good for eating out of hand, or as a breakfast food, or for use in soups, stuffing, and casseroles. V

Big liver disease, until now, could be detected only by post-mortem examination of chickens. Now it is possible to detect this highly infectious and cancerous disease in live chickens by means of an enzyme-activity test, which in one laboratory experiment gave negative results on nearly 300 healthy chickens, and correct diagnosis in 40 out of 42 healthy looking but tumorous chickens. V

Bee psychology, or bee mechanism, is being studied by Dr. Max Renner, of the University of Munich. He trained part of a colony of 5,000 honeybees to feed at a certain hour in Paris, then flew the whole colony to New York in less than a day. At the American Museum of Natural History there, the trained bees came for their food on the same 24-hour cycle regardless of human clocks. He then trained another group to feed at a different hour and flew them back to Paris. On arrival there they kept to the New York schedule, to which they had been trained. Thus, a bee's memory of time intervals operates independently of such external factors as the natural rhythm of night and day. V

When spring comes and the young livestock are born, don't get too fresh or careless with the mothers. Even a doe rabbit is courageous under such circumstances, as was proved in Missouri, where people must be shown. The superintendent of a wildlife refuge heard a commotion in some bushes and saw a six-foot blacksnake travelling away as fast as it could go. Why? A cottontail rabbit with its bunnies hidden in the bushes, was really chasing it. V

Will future farmers become chemists? The research director of Seabrook Farming Corporation in New Jersey says that chemical agriculture has already increased U.S. crop production by about 40 per cent in five years. He adds that the application of chemical control of insects, diseases and weeds could produce present U.S. harvests from 120 million fewer acres. Chemical seed treatments, chemical fertilizers, chemical insecticides, and herbicides, chemical growth stimulants, and chemical food preservatives are all in use, and likely to be greatly increased in the future. V



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You, too, can get quick relief from that dry, hacking or phlegmy bronchial cough. Take Templeton's RAZ-MAH—the remedy specially made to relieve Chronic Bronchitis, Asthma and Hay Fever. Enjoy your work, enjoy your rest—start taking RAZ-MAH today. 79c and \$1.50 at druggists. R5-4

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will lay more eggs on less feed, will lay longer with less hen house mortality than any other breeds we have to offer. Put in at least part of your flock of these sensational layers this year, and compare them if you will with any of the high-priced inbred hybrids, we know you will be back in 1957 for Tweddle New Series 400, 401 and 402. Also broiler chicks, Turkey Poult, laying and ready-to-lay pullets. Catalogue.

Tweddle Chick Hatcheries Limited
FERGUS, ONTARIO



POULTRY



These Barred Rock capons show the good size that the breed can attain. It is a dual-purpose breed, noted for large eggs. Crosses make good broilers.

Fast-Feathering Cuts Feather-Pulling

FAST-FEATHERING is an important characteristic of birds, since it reduces the amount of feather-pulling in the pen. Fortunately, because fast-feathering birds breed pure for that character, it is a fairly simple matter for hatcheries to get their supply flocks on a fast-feathering basis fairly quickly, and thus provide nothing but fast-feathering chicks.

However, there are factors other than feathering involved in feather-pulling and cannibalism. F. N. Jerome and Dr. S. J. Slinger of the Poultry Department, Ontario Agricultural College, Guelph, make the following suggestions to control these vices.

Ventilation is a factor. Keep air in the pens fresh at all times, keeping the pen somewhat on the cool side.

Mixed chickens should have one square foot of floor space per bird. Where cockerels are being grown, 1.1 square feet is better, while for females, 0.9 square foot is sufficient.

Excessive light can contribute to these vices. One square foot of window space for each 30 or 40 square feet of floor space in the broiler pen is sufficient.

Provide enough feeder space. About six feet, counting both sides of the trough, are required for each 100 birds, up to four weeks of age, then ten will be required, and later 30. Half the birds should be able to eat at once.

All-mash feeding seems to bring less feather picking than does pellet feeding.

Diets high in corn cause more feather picking than diets containing mostly wheat. Oats, high in fibre, are better still.

If feather picking is anticipated from past experience, birds can be de-beaked at three to four weeks of age.

Droppings Show Condition of Bird

KEEP an eye on poultry droppings, says Simon Brooke, a British poultry specialist. The texture and color of droppings can tell you the following: bright green droppings, di-

gestive trouble; brown, worms; reddish, ovarian strain; yellow, liver trouble; white, kidney trouble; yellow and green, typhoid; mustard color, diarrhea; blood in droppings, coccidiosis.

Normal droppings should be firm in texture and grey-green in color, with a capping of white kidney urates. V

Calories And Feed Costs

FEED costs are two-thirds of total egg production costs, and in choosing cereal grains to mix with commercial concentrates, it pays to consider the cost of the grain in relation to the energy it provides.

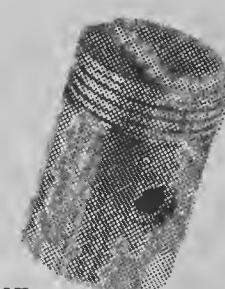
Tests at the Experimental Farm, Brandon, Man., show that the energy content of one pound of wheat is 102 calories, barley 81 calories, and oats 76 calories. Therefore, a bushel (60 pounds) of wheat gives 6,120 calories, and it would take 75.5 pounds of barley, or 80.5 pounds of oats, to produce the same result. If wheat is worth \$1.40 a bushel, barley would have to be worth 88 cents and oats less than 60 cents a bushel to be as economical. V

Smaller Laying Birds to Cut Loss

BECAUSE broilers are capturing the poultry meat market, the demand for fowl is declining.

This is becoming a serious problem, and the Poultry Department, University of Saskatchewan, is hoping to overcome it by producing a smaller laying bird. The idea is that the sale of a smaller bird will not represent as great a loss to the farmer as the present type does at the end of the laying year. There is reason to believe that this can be done.

The poultrymen at the University are also testing rapeseed meal against soybean meal as feed for layers, and will be satisfied if the rapeseed keeps up egg production, even if meat quality is less satisfactory. Rapeseed is gaining popularity among Saskatchewan farmers as an alternative crop to grain, and is cheaper than soybeans. V



JUST LIKE INSTALLING A BIGGER 1956 ENGINE

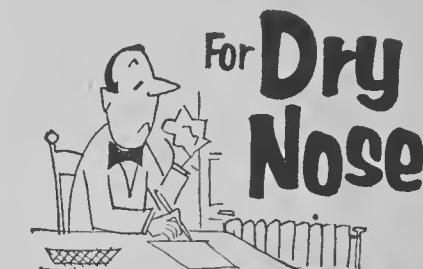
These new lightweight aluminum pistons are of larger bore than the pistons already in your tractor. They are precision made by M & W and are called add-Pow'r because they add three to twelve more horsepower to your tractor. Ask your dealer to install M & W add-Pow'r pistons and sleeves—they're available for practically all makes of tractors. Show him this ad or write to your nearest distributor for a free leaflet.

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Winnipeg 4, Man.

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GUARANTEE OF
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Turkey Poult - Ducklings - Goslings
Order Now — Jan. to June delivery

All chicks 100% Canadian R.O.P. Sired, Canadian Approved Broad Breasted Bronze Turkey Poult. Pure Bred Pekin Ducklings and Toulouse Goslings.

10% FREE CHICKS
add to all orders if booked four weeks or more in advance of delivery date.

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This clean stainless antiseptic known all over Canada as MOONE'S EMERALD OIL, brings sufferers prompt and effective relief from the itching distress of many skin troubles—Itching Eczema—Itching Scalp—Itching Toes and Feet, etc.

MOONE'S EMERALD OIL is pleasant to use and it is so antiseptic and penetrating that many old stubborn cases of long standing have yielded to its influence.

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Young People

On the farm and at home



Junior Council of 4-H National Club Week, elected in November, at Toronto. L. to r. (front): John McFaul, B.C., president; Mary Smith, Alta., secretary; Lynn Biggart, Sask.; Penny Treasure, Man.; Bill Trathen, Ont.; (rear): Elwood Hodgins, Que.; Huguette Ouellett, N.B.; Betty Chaffey, Nfld.; William Longley, N.S. (Absent, Eunice McNaught, P.E.I.)

Getting Out A Paper

A NEWSPAPER, organized and written by high school students or a club can be made into an interesting and worthwhile project. But first, let's look at some of the points which must be considered in such an undertaking.

How many copies will be expected? How will they be made?

If a single copy will serve, then the news items, features and stories can be written in longhand on separate sheets. The sheets then may be clipped or stapled together and inserted between protecting cardboard covers. Such a paper is read aloud at a meeting, left in a safe place for members to study at opportune moments and is finally filed away for reference. A neater and safer way is to have someone make four or five typewritten copies—if a member has the skill and the necessary typewriter. Hectograph copies of the "paper" may be made and distributed to individual members. Those groups fortunate in having access to a duplicating machine, can readily prepare copies for all its members—and possibly some to sell.

Printing is out of the question, due to costs of materials and wages. Sometimes a local printer or manager of a newspaper would be willing to get out a "special issue." The students assist by bringing in news, doing little written "sketches" of the town or its people and by selling advertising space to merchants and business men, who might be interested in helping such a project. The method used, the number of copies to be made, limits the size and the number of times a paper can be produced and published. It is better to produce one or two good issues a year than to attempt too many.

Choosing of the staff for the paper is important. The number varies ac-

cording to the size of the project and includes business manager and assistants; editor-in-chief, editor, reporters of news and special events. Under these will come: sports, social activities, local developments in business or industry as well as special departments on books, music and plays.

The fun and interest comes when you see one of your own member's account of a hockey game, a review of a movie at the local theatre or the Glee Club's last concert. Each staff writer had to go out and "get his story" and then tell it in words of his choosing. If the editor picked his staff wisely, with a view to their special interests and talents, and they in turn produced good local copy about things and people in the district, then the paper is bound to interest the rest of the members—and perhaps others.

What kind of "material" should go into a school or club newspaper?

The leading or "front page" should consist of feature articles; local events, plans for the future—new buildings, new business places; sketches written around leading or interesting people, a bit of history of that locality, a hockey game, an interview with an important visitor. The inside pages consist usually of shorter and more intimate items, some of which are straight "opinion" in form of editorials. There may be too, a humor or gossip column, book reviews, a travel story and an old grad or member column.

There is a growing interest in the thinking and writing of young people today. And rightly so, for they will be the editors, publishers and advertisers of the future. You may find that you have one or more in your midst. It just might be that they are going to get their start by helping put out your paper.

We know of at least one daily paper in a large Canadian city, which featured a dozen or so book reviews written by high school students, during

last year's celebration of Young Canada Book Week. If you can encourage members to produce interesting, well written articles on topics of local interest they might be brought to the attention of the editor of the town's paper and he might be willing to give them "space" in his newspaper. Recently we noticed an item concerning the plans of Mr. Anthony Frisch of Pickering College, at Newmarket, Ontario, to compile an "Anthology of Canadian High School Prose and Verse." It will be an honor for those young people whose work is selected for that first volume. ✓

Tell-tale Toothmarks

AN unusual and interesting hobby awaits you out-of-doors. As you roam about in the winter woods you may have discovered evidences of animals gnawing at shrubs, bark and trees. Have you noticed any difference in these marks? What kind of animal did the gnawing—a rabbit, mouse, beaver, squirrel, muskrat, porcupine, or gopher?

When you come across a gnawed branch, cut off a short section. Label it telling the time of year, kind of shrub and what animal nibbled it. It's easy to identify the animal if you see it at work or examine the tracks it has left in the snow. Build up a collection of different kinds of shrubs and bark nibbled by various kinds of rodents. Also collect branches gnawed by deer, moose and elk. Notice the great difference between branches



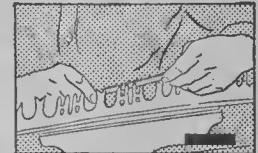
gnawed by deer who have front teeth only in the lower jaw and rodents which have chiselling teeth in both upper and lower jaws which makes it possible for them to shear off a branch as cleanly as though cut by a knife. Examine muskrat cuttings near a marsh and stumps cut by beaver around a dam site. Study toothmarks on rose bushes and apple trees.

Soon you will have a fair number of specimens to surprise and interest your friends. You might want to make a display panel from plywood on which to fasten your gnawed specimens. Working on a collection of this kind will add interest to your tramps and increase your knowledge of woodcraft.—A.T.



How to cut more wood per day

Next to the degree of human skill, it's the condition of the saw that counts. Keep your saw teeth keen and true with easy-to-use, long-lasting Black Diamond saw file "specialists."



BLACK DIAMOND Crosscut Saw File

Traditionally fine Black Diamond quality. For both cutter and raker teeth. 6", 8", 10" lengths. Made in Canada by Canadians especially for Canadian needs, and sold by good hardware retailers throughout the Dominion.

Write for free book, "FILES FOR THE FARM." 48 pages, hundreds of informative illustrations. Don't be without it.

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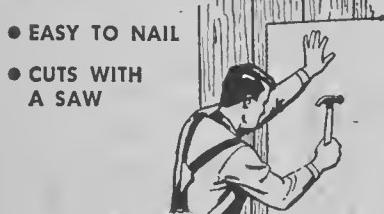
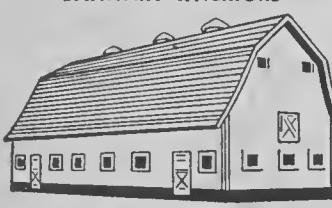
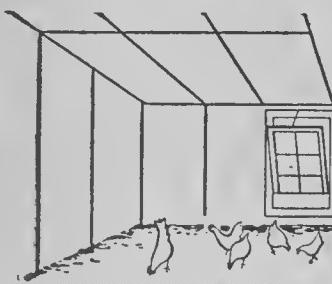
Make \$5,000 A YEAR or more

... raising fur-bearing animals. Others are doing it. Send for Free copy "Profitable Outdoor Occupations," or enclose dime for sample magazine. Fur Trade Journal, 588 Mt. Pleasant Rd., Toronto, Canada.



Johns-Manville ASBESTOS FLEXBOARD

Solves dozens of building problems around the farm



Indoors, outdoors, as a siding, and in countless other applications, Flexboard is the ideal building board for the farm. Made of asbestos and cement it wears like stone. Tough and strong, it is easily worked with ordinary tools and can be applied to conform with curved surfaces. All sheets are 4 feet wide, in lengths of 4', 8', and 12'. Thicknesses available $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ".

FREE — For 16-page book, on Flexboard, write Canadian Johns-Manville, 565 Lakeshore Rd. E., Port Credit, Ont.



WORKSHOP

Jobs That Can Save Time and Money

Winter is a good time to prepare for the rush of work that comes with the big thaw

Stretching Screen Wire. It is simple to stretch screen wire by the method shown in the sketch. Cut the wire about 3" longer than required. Secure a $3\frac{1}{2}$ ' long, 1" by 1" wood strip and nail the wire to it, using about 5 tacks. Tie a suitable length of rope to the stick. To stretch the wire, nail it across the top of the frame first, and then put one foot in the loop of rope to apply pressure while nailing the sides and bottom of the wire. Cut off excess wire and remove the tacks from the board.—H.E.F., Texas. ✓

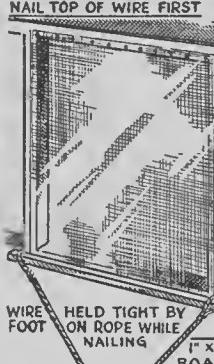
Slats for Canvas. When I want to replace the slats on the canvas of combines and binders, I find that used V-belts, cut to the right length make excellent substitutes. They outwear the canvas and won't splinter. They can be used also as extra slats between the regular ones.—D.M.E., Alta. ✓

Feeding Trough. When I needed a handy feeding trough for calves, all I had to do was to remove the oil pan from a wrecked car. It was just the right height for calves, and the rounded sides meant it was easy to keep clean, because there were no awkward corners.—P.K., Man. ✓

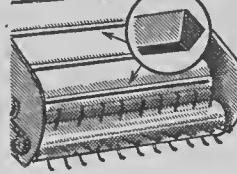
Worn Binder Canvas. When a binder canvas starts to wear, place some lace leather, three-quarter inch by two inches on the underside of the canvas at the slat, and secure it with a rivet at the end of the leather in the line of travel. A three-quarter inch leather washer on the upper side of the canvas keeps the rivet from pulling through. Old harness leather is best for this purpose.—C.W.A., Alta. ✓

Garden Marker. Sowing seed in the garden can be made easier by using a marker that does more than mark. By replacing the usual wooden points of the marker with discarded cultivator points, or small cultivator shovels, this implement will also make furrows deep enough for seeding.—E.P., Sask. ✓

NAIL TOP OF WIRE FIRST

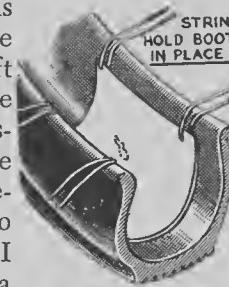


OLD V-BELT MAKES SLAT FOR BINDER OR COMBINE CANVAS



Gate Post. Four grease drums with tops and bottoms removed can be welded together to make a useful gate post. When erected, they should be filled with cement and rock. Eye-bolts can be inserted to attach fence wires, and the post painted in an attractive color.—A.A.M., Alta. ✓

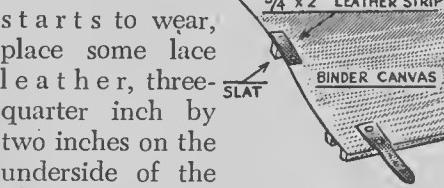
Boot for Tire. When placing a boot in a tire, there is a chance that the boot will shift away from the hole in the casting, while the inner-tube is being inflated. To prevent this, I have punched a small hole at each corner of the boot, and threaded 2' lengths of heavy string through the holes. After laying the boot in the tire, leaving the doubled strings over the bead of the tire, I put the tube in and inflated it to a few pounds pressure. I could shift the boot to the right place by pulling the strings, and then removed the strings by pulling on a free end of each.—H.E.F., Texas. ✓



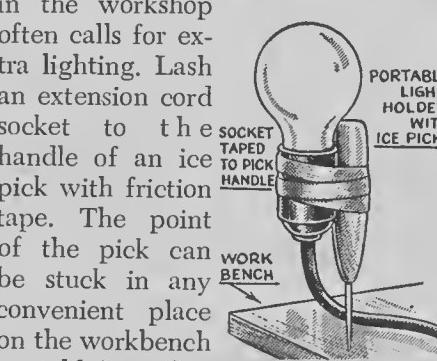
Finger Guard. Using a paint knife for a long period can very easily lead to a sore finger. I find a good way to avoid this is to take a piece of rubber tubing, about 1" long, and slit it open down one side. It can then be slipped over the blade, next to the handle, and so protects the finger.—D.M.E., Alta. ✓

Flux Substitute. Lemon juice can be used to prepare a surface for soldering. The citric acid from the lemon acts like a commercial flux by helping the solder to penetrate into the pores of the metal. I find this substitute very handy when I run out of flux.—Z.W., Man. ✓

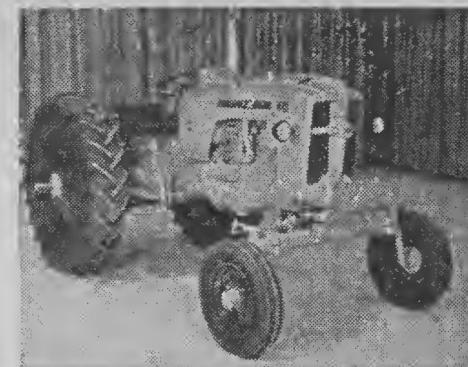
Portable Shop Lamp. Close work in the workshop often calls for extra lighting. Lash an extension cord socket to the handle of an ice pick with friction tape. The point of the pick can be stuck in any convenient place on the workbench or table, or fastened to a wall wherever the extra light is needed.—H.E.F., Texas. ✓



BINDER CANVAS



WHAT'S NEW



Ten distinct forward speeds from 1.4 to 16 miles per hour are features of two new tractors in the 30 and 40 h.p. classes. The manufacturers claim that these new models, which are streamlined, are based on the recommendations of farmers, dealers and agricultural experts. (Minneapolis-Moline Co.) (106) ✓



This new 21-foot disk harrow will double-disk up to 125 acres a day, say the manufacturers. Described as a double-action, wheel-carried harrow, it has spring pressure rods, which make the rear extension gangs work deep or shallow at the outer ends, as desired. (Deere & Co.) (107) ✓



Rubber-on-rubber husking is a new principle in a two-row corn picker, and removes husks from the ears with less shelling of kernels than with steel husking rolls, according to the manufacturers. The four-blade rotary feeders are designed to maintain a uniform flow across the rolls. (Allis-Chalmers Mfg. Co.) (108) ✓



"Metermatic adjustment" on a new baler allows farmers to make bales in any length from 12 to 52 inches, according to the manufacturers. It gives the right density for drying or storing, and the right weight and firmness for handling without leaf loss. (New Holland Machine Co.) (109) ✓

For further information about any item mentioned in this column, write to What's New Department, The Country Guide, 290 Vaughan St., Winnipeg 2, giving the key number shown at the end of each item, as—(17).

1956 Farm Prospects

Continued from page 9

this year support prices on this crop are lower in the U.S. In early November local markets in southern Ontario were quoting \$4.50 per bushel.

The dried pea acreage as well as yield was down, and total production was the lowest on record, as a result of prolonged dry weather in the growing season. The small crop will probably be sufficient, on balance, to supply Canadian needs, allowing for some exports and imports. Domestic consumption has been practically cut in two since the pre-war period.

Mustard Seed. This is a new crop in recent years and has been confined to southern Alberta, where about 78,000 acres were planted last year, producing an estimated 53 million pounds. Most of the crop is grown under contract and will be exported to the United States. Mustard seed may actually be in surplus this year, since production increased both in Canada and the United States quite sharply.

Tobacco. Canada's tobacco crop last year totalled 122.2 million pounds, re-dried weight, which was 44.3 million pounds less than the 1954 crop. Canadian manufacturers use about 113 million pounds of tobacco, of which about one million pounds is flue-cured, and require stocks sufficient for 16 to 18 months, regardless of the current crop. It is expected that about 35 million pounds of flue-cured tobacco will be exported from Canada this year, mostly to the United Kingdom, in addition to about one million pounds of burley. The minimum average price for the flue-cured tobacco of the 1955 crop was 44.25 cents.

Seeds. The supply of hybrid corn seed is one of the largest on record. A record crop of timothy seed was produced for the second consecutive year, but the production of creeping red fescue and Kentucky blue grass were well below 1954 level. The crops of other grasses, clovers and alfalfa were about on the 1954 level and should be adequate to meet domestic requirements, with some over for export. U.S. total production of alfalfa was the largest in history so that a small alfalfa crop in Canada will be adequate for domestic purposes. Some red clover seed may be imported from the U.S. where a 58 per cent increase was secured. Double-cut red clover may be relatively scarce domestically. The export market for several kinds of seeds is likely to be weak owing to surpluses in the United States and western Europe. Prices for most kinds of forage crop seeds are lower than a year ago. Crested wheatgrass is an exception.

Vegetable and Root Seeds. Seed of most of these crops grown in Canada does not meet domestic requirements, imports normally being necessary from the U.S. and Europe. British Columbia produces most of the vegetable and root seeds, and despite a cool, wet growing season, secured larger seed crops of most kinds than in 1954, except of Swede. Ontario helped produce a larger crop of beans, and both Alberta and British Columbia contributed to a heavier pea crop. Onion

sets produced in Ontario, Manitoba and British Columbia were up 50 per cent over 1954 at 4.3 million pounds.

Fruits and Vegetables

Apples. The Canadian apple crop last year was estimated at 19.4 million bushels, or one-third more than in 1954. This crop is produced commercially principally in Nova Scotia, Quebec, Ontario, and British Columbia. Despite a crop of better quality, the abundant supply brought widely varying prices across Canada. For McIntosh, Canada Fancy, average wholesale price at Montreal in October was \$1.31 per bushel, compared with \$3.25 per bushel in October, 1954. Comparable prices at Toronto were \$1.64 and \$2.68, and in Vancouver \$3.42 and \$3.44. Lower prices caused about 50 per cent more domestic apples to move to the 12 principal Canadian markets during September and October. The United States, which last year shipped 987,000 bushels to Canada, will probably not find our lower prices as attractive this year. U.S. apple shipments to the United Kingdom are being subsidized. However, it is expected that about a million bushels will be exported to the United Kingdom and 1.2 million bushels to the United States.

Stone Fruits. It is expected that the trend toward increased production of apricots, cherries, peaches, pears and plums, which has continued for the past 20 years, will continue in 1956. Canadian peach growers may face greater competition from the U.S. this year, because the crop last year was curtailed by frost in the 12 southern states.

Small Fruits. Wet weather in British Columbia and prolonged drought in Quebec curtailed the 1955 strawberry crop. The demand for fresh, frozen and processed strawberries has been strong and is expected to continue. Because hot, dry weather in Ontario also reduced the raspberry yield last year, larger crops of both raspberries and strawberries would normally be expected this year.

Potatoes. Canada produced last year an estimated 63.6 million bushels of potatoes, or 23 per cent more than the previous year. All provinces, except B.C., contributed to this increase. For the balance of the crop year U.S. developments will determine prices, exports, and imports. U.S. prices have been down 23 per cent in the face of a large crop, and a program was inaugurated in September to divert some of the crop into starch, feed and flour. Total potato exports are expected to exceed the 2.8 million bushels exported in 1954-55. It seems likely that both acreage and yield will be lower in 1956 than last year.

Cabbage, Carrots and Onions. These are the principal storage vegetables, and following an increase in acreage last year, exports from Canada last fall were far in excess of the amounts exported the previous year. Prices are higher on Canadian markets than a year ago, primarily because production of these crops in the U.S. was lower last year. Onion acreage declined in Manitoba, Alberta and B.C., but increased in Quebec and Ontario enough to make the total crop about the same as in 1954. V



"He's my very own, isn't he, Dad?"

You can probably imagine your boy in this situation, or recall it if he already has a dog of his own. He deserves the things that make him a happy youngster. But, are you taking steps now to ensure his happiness later on? Will he benefit from a complete education, and will his natural talents be encouraged and developed? These are the things that mean happiness and security to a grown boy, but they also mean a substantial financial outlay for his parents. If you open a Savings Account at Imperial Bank of Canada, and save regularly, you'll have the money later to provide these essentials for your child. Save today and you will be making sure he will have everything a boy—and his Dad—could wish for.

IMPERIAL
"the bank that service built"



Disinfectants Often Wasted Through Misuse

Today's farmer has at his command the most powerful army of disease-fighting agents ever devised to protect the health of animals and birds. But like any army, these powerful disinfectants can be rendered worthless through improper use. By far the commonest error: expecting disinfectants to kill germs and parasites protected (as they usually are) by dirt, grease and animals' fats. *No disinfectant can possibly kill unless it contacts the germ or parasite.* The source of infection must be exposed before it can be eradicated.

LYE CLEANING BEST

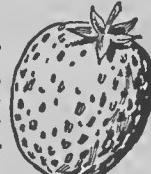
Most authorities agree that the best way to expose infection sources is by cleaning with lye solution (2 tablespoons of Gillett's Lye to a gallon of water). There are several reasons why lye is recommended. It is one of the most effective agents known for the removal of grease and dirt—especially from hard-to-get-at cracks and corners. It deodorizes and sanitizes. And lye itself also kills many bacteria, germs, viruses, etc., making it unnecessary in many cases to use a disinfectant at all. Under normal conditions, *regular and thorough cleaning with lye solution is all that is needed to maintain animal and bird health permanently.* And, should serious infection occur, lye cleaning should be intensified to make sure that disease carriers are exposed to disinfectant action.

GLF-113



LARGE FRUITED EVERBEARING RUNNERLESS STRAWBERRY FROM SEED

This and nearly 2,000 other fine things for your garden, described in our big illustrated Seed and Nursery Book for 1956. Send for your FREE copy to-day.



DOMINION SEED HOUSE
GEORGETOWN, ONT.

BEST AND MOST PROFITABLE Deluxe 300-Car Drive-in Theatre

in medium size Alberta town

FOR SALE

This town has year-round payroll in addition to being the centre of prosperous mixed farming area. This is a real buy and owners are selling to devote full time to other business. The theatre has an 85-foot cinemascopic screen with all the necessary equipment. For details write: Theatre Agencies Limited, 1120B Westmount Blvd., Calgary, Alberta, or phone Mr. Ross, Calgary 87-2349.

Moving Hay The Easy Way

by W. G. JONES

WITH necessity the mother of invention, Joe Onesto was faced with the problem of how to get his hay home from the meadow nearly half a mile away. With no horses left and the snow too deep for tractor travel, Joe decided to try out an idea that had been growing in his mind for several years—that of moving the whole stack at once. He thought it would take considerable force to accomplish the feat, and hired a neighbor, J. McLaren, with his D-6 "Cat." A roadway was cleared and the snow also moved away from the stacks. The "Cat" tractor was backed to a stack measuring 12 by 14 feet, and containing well over four tons of timothy and clover hay. A 12-foot 6 by 10-inch timber was placed at the back of the stack as close to the ground as possible. A cable was then securely fastened to each end of the timber and run along both sides of the stack, to the tractor in front. Ropes were thrown over the stack and tied, to hold the cables about 18 inches from the ground, as a guard against the possibility of the cables cutting under the stack.

The first stack was started without jerking and was moved with a steady pull. There was no appreciable loss of hay, and no wastage. The stack was moved without incident from the hay meadow, across a low ditch, onto the road and thence into the yard by the feedlot. Several stacks were moved at the time, all successfully, except the last one, which caused some trouble, as cattle had tramped around it. When it was finally loosened, about a foot of hay, or half a load, was left on the ground.

The stacks were built with a horse-sweep and Dain stacker. All hay to start a new stack was always swept in, in the same direction. About four good sweep loads would make the base of the stack. When stacks were moved they were always started in the direction in which the hay had been swept in to start the stack.

IN succeeding years all hay was moved by the stack about the same way, except that two wheel tractors were used—a two-plow and a 3-4 model. They were found to have ample power for the job. It was also learned that a good half-inch chain would take the place of the cable. Occasionally it took a few jerks to start a stack with wheel tractors, but otherwise no difficulty was experienced. Mr. Onesto has no doubt that larger stacks could be moved quite as easily, but has found a four- or five-ton stack to be the most practical to make with the Dain stacker.

Since the first time the hay was moved, a better drawbar has been made to pull the stacks. This drawbar is made of two heavy timbers, 12 feet long, fastened together parallel, with rods and pipes, two feet apart. Two short chains are secured to each end of the timbers and the drawbar is used on its side, as it were. The draw chains are hitched to each short chain of the drawbar and can be adjusted for proper height with grab hooks. Ropes must be used over the stack to keep

the chains away from the ground.

This is the fourth year that Mr. Onesto has hauled his haystacks to the feedlot in this manner and he finds it a great labor saver.

C.F.A. Appraisal

Continued from page 10

federal and provincial governments, to achieve this objective. Moreover, the government action required may involve expenditures to get results.

Agriculture is not looking for special privileges at the expense of the public. Adjustments to changed world market and supply conditions may be necessary, if the present world supply condition does not change. These adjustments will, in such a case, have been largely made necessary by a world expansion in farm production (see page 11—ed.). In respect to Canada, whatever expansion there has been in production, has been achieved without subsidization: yet, in our export markets we are being required to meet the competition of products produced under highly subsidized programs. It is not reasonable to expect that Canadian farmers should be required to suffer drastic reductions in income under such conditions.

Farmers in surplus-producing areas have continued to produce at the high level induced by war and post-war needs. Much of the Canadian expansion in grain production has been the result of favorable growing conditions, rather than expansion of acreages. Farmers in the traditional importing countries have pushed production far above the pre-war level, and underdeveloped countries have made their contribution as well. Together, world farmers in 1954 attained the highest level of production in history. Meanwhile, market demands have lagged far behind production. In short, the ability of world producers to produce has far outstripped the ability of world consumers to buy. Herein lies the crux of the serious world food and agricultural problem of today. While other factors enter in, this situation provides a major reason for the accumulation of surpluses of food and fiber in some countries.

It is only a comparatively few years since food scarcity was regarded as one of the most critical problems which the world faced, and farmers were repeatedly urged to produce more, and yet more. Surely now, when farmers by their conscientious effort and increased productivity have created the greatest abundance on record—which should be regarded as a blessing for all—they should not be penalized by asking them to bear the full burden caused by a surplus of supply over effective consumer demand. Canadian farmers are more vulnerable to penalization of this kind, than food producers in most other countries.

The most realistic way for the people of Canada to help her food producers share this burden of abundance is to support the programs and the expenditures necessary to achieve the desired results.

Moreover, some expenditure by the people of Canada to save agriculture from depression is probably a necessary investment for the purpose of maintaining full employment, thriving business and a healthy national economy.



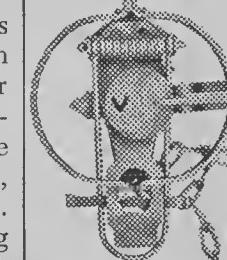
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A Cat And Dog Affair

What was this all about, anyway—the strength of habit, or the value of pretense

by DELBERT A. YOUNG

FIVE years ago we brought Butch to this house. Butch is our cat, an outsize animal of mixed ancestry, Persian predominating. We'd been in our new home less than an hour, when Butch decided to look the neighborhood over.

We let him out. Five minutes later the hubbub began. We could hear a dog barking and snarling and a man shouting, "Liz! Liz! Stop it! Leave the cat alone!"

We rushed outside. Butch was perched precariously on the top of our picket fence. He was hissing, spitting with fury. He was fluffed to twice his normal size.

Underneath him was the fiercest looking British bulldog I've ever seen. It was trying to climb the fence in its eagerness to get at Butch.

The man finally got his bulldog under control, but Butch was smart enough not to risk leaving his perch.

"I'm your neighbor," the man explained, "the name's Marshall—Ted Marshall. I'm sorry about this." He put out his hand. I took it mechanically, not putting much warmth into the shake. "That your cat?" I nodded. "You'll have to watch it," he warned. "Liz hates cats—always has. Other than that she's well behaved."

We looked at Butch and we looked at Liz. We decided we could afford to pamper Butch more, feed him pure cream. He wouldn't be with us long. The neighbor increased our sense for foreboding by adding, "Liz'll get him for sure."

Liz gave it her best. She never let the cat forget that he'd been brought into a restricted area. Every time she saw him she'd make for him, running low on her stubby legs and making the most horrible sounds. Each time we heard the racket our hearts constricted. Would this be the time she got him?

But Butch had brought his alley instincts along with him to his new home. He was never caught with his perches down. He might be only one short jump ahead of Liz, but he always made it to the fence, the verandah, or the clothesline post. Many a time I watched the race, held my breath, let it go with a sigh when Butch gained safety.

However, in time, the suspense dwindled. We got so when we heard

the fuss we'd just remark, "Liz is after Butch again."

Months passed. One day, Teddy rapped on our back door. When I opened it I could hear Liz snarling and barking down by the back lane. Marshall was smiling rather oddly.

"Come with me for a minute, I want you to see something."

We journeyed toward the sound of the hassle. I stopped and gaped. Liz was in front of her kennel in a proper connoisseur, as she tried to climb up on it. The reason? Our cat.

Butch was sitting on the ridge, gazing down on Liz and daring her, yes daring her, to try and get him. In case of accident he'd made sure he could retreat in safety. It was one jump to a packing case, one from there to the fence.

Ted's eyes had laugh crinkles at the corners, "Butch is getting some of his own back," he said. "Part of the time now, when you hear that fuss, it's him teasing her like he's doing now."

We both laughed.

The years rolled by. Butch had been a youngster when we came. Now he was middle-aged. Liz had been middle-aged when we'd arrived. But age hadn't changed her opinion of Butch. She still chased him. The only difference I could see was that Butch didn't have to run so fast to make the clothesline post. That was just as well. He was slowing up some, too.

Things continued in this manner until last spring, but we humans had nearly forgotten about the feud. We never listened any more; seldom were aware of it. One day I realized that something was amiss. Then I had it. Liz wasn't chasing Butch any more. Butch wasn't teasing Liz. I mentioned it to my neighbor.

He shook his head sadly, "Liz can't chase anything any more. Liz's about had it. She's 12 and the rheumatism's getting her. The wife wants me to send her away, but I just can't." He sighed, "She's been such a nice dog."

A couple of days later, I was working in the garden when he beckoned me over. His voice was low and conspiratorial. "I want you to see something," he said.

I followed down until we were close to Liz's kennel. Liz was stretched out in the sun, soaking the heat into her old bones.

In front of her, inches from her stubby nose, was Butch. He too, was dozing in the sun.

"Thought you'd like to see that," said Teddy, "Liz and Butch that way after all those years."

"When did Butch stop teasing her?" I asked.

"Soon as she got sick. Lately they've been friends, and he's been keeping her company—like now."

"Maybe they always were friends—in a way," I said.

It had occurred to me that if Liz had really wanted to catch him she would have. Once, just once, out of the hundreds of times she had chased him, she would have taken him by surprise.



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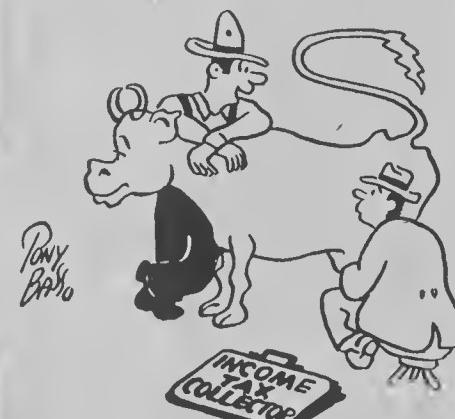
Continued from page 11

major concern, especially in Italy and France, where the use of a suitable hybrid increased the pre-war yield by 640,000 tons in 1954.

OF at least equal importance to the developments in arable crops is the work in grass and legume improvement and management. In all regions of the world, except those with arid or semi-arid conditions, the output of the hay and pasture fields has been increased considerably. This was done by developing better seed varieties, fertilizing the fields, using rotational grazing and, in general, by better management. More of the grass is being utilized by means of silage, drying and other means of conservation. In many countries the trend is toward a shift from a cereal one-crop economy toward a crop-grass-legume rotation. The result is seen in better land use and in the larger numbers of livestock produced.

Developments similar to those in crop production are being experienced with livestock in the various countries of the world. One of the important contributions of modern technology to livestock production is in the field of disease control. Diseases such as foot-and-mouth, tuberculosis, brucellosis, rinderpest, and Newcastle, are now being successfully controlled by vaccines, antibiotics, and other drugs. Another technical change in livestock production is artificial insemination and deep freezing of semen. These latter advances in technology have aided in speeding up the processes of breeding better quality livestock. These improvements in livestock, together with up-breeding and the selection of better strains of native livestock and improved methods of feeding animals, are resulting in a larger total output of livestock products.

The task of bringing about all these improvements is not an easy one. In many countries, facilities for research are scarce or non-existent. Trained workers to organize, direct and supervise the research are in short supply. There is also a considerable time lag between the development of a new technique or method, and its adoption by the farmers. This is a problem of mass education and involves the agricultural extension services of the countries concerned. But considerable progress is evident in all of these areas. Under the technical assistance programs now in operation, scientists are provided to under-developed countries to organize research programs and to train local workers. Seed farms for the breeding and distribution of better seeds are being estab-



"Go ahead! Try! You ought to be terrific at it."

lished. Veterinary services are coming into operation, providing the necessary vaccines and drugs, as well as leadership and direction in livestock improvement. Of equal significance is the establishment of independent extension services in a large number of countries. These services, which do educational work among farmers, are separated from the regulatory work that governments in some countries expect their extension workers to carry on. In many of the under-developed countries where these new services have come into being, they not only provide information on matters of agricultural production, but co-ordinate their work with health education and other services to rural people. Thus, these agencies at the same time attack the problems of food production, health, literacy, co-operation, and other matters.

IT is in this fashion that new technologies are being introduced to rural people everywhere, with the result that the total output of farm products is increasing. A few examples of changes in crop and livestock production for several regions will illustrate the influence of technical change on agriculture. These are comparisons of the current situation with that of pre-World War II.

Yields of cereal crops in Western Europe are now 17 to 18 per cent above pre-war, with hybrid corn leading these crops at a permanent 30 per cent increase. Milk yields are ten per cent higher and eggs per hen 13 per cent higher. Livestock numbers are about seven per cent higher than pre-war. In the case of livestock, the increases are due, in part, to the technical changes in production and in part to the decline in the number of horses on farms, which enables farmers to carry other livestock in their place.

In North America, changes of a similar nature have taken place. Crop yields in recent years have averaged about 20 per cent higher than pre-war, and yields per unit of all livestock are about 25 per cent higher. In addition, numbers of productive livestock are 15 per cent and nine per cent higher for United States and Canada respectively.

Australian yields show considerable increases currently compared with pre-war. Wheat yields are 50 per cent higher partly due to better weather, but also because of better varieties, heavier fertilization and better rotations. Milk yields are seven per cent higher, and the wool clip per sheep averages 8.6 pounds now, compared with 7.7 pounds in the earlier period. Total livestock numbers are also up about 17 per cent, mainly for the same reasons as in the regions previously mentioned.

The situation in the under-developed countries is not as clear cut. However, certain trends are discernible. The impact of technical change is not as marked, because the changes were not adopted as rapidly in these countries as in the more advanced regions. Consequently, a recovery of the pre-war conditions or increases are only now beginning to appear. In the Far East, over-all crop yields are about ten per cent below pre-war. Japan, the Philippines and Malaya are exceptions currently showing higher yields of rice.

Available information on livestock production in the Far East indicates

numbers at present equal to, or slightly above, the pre-war level. This is true especially in cattle, pigs and goats. This condition points to the presence of a significant effort in production. In these countries there is only a slight decline in work animals (horses, mules and asses), but a considerable loss of productive livestock was experienced during and immediately after the war. The recovery to pre-war levels points to the influence of technical change in this field of production.

Total agricultural production in the Middle East is currently about 40 per cent above pre-war. This increase is almost entirely the result of more land in crops,—about 40 per cent;—and more livestock,—about ten per cent. In this area the increased output is

mainly the result of greater inputs of capital. A striking example is Turkey, where the area under cultivation expanded sharply and the use of farm machinery increased considerably. Water control and irrigation also play an important part in this area.

In other regions of the world, such as Africa and Latin America, increases in total food production are also in evidence. However, here again, these increases are mainly the result of greater acreage in crops and numbers of livestock, rather than increases in yields per acre, or per animal. It is noted that the total output of farm products has risen by 30 per cent in Latin America. At the same time the acreage in crops rose by 25 per cent and there was some increase in the numbers of livestock. It seems, therefore,

that very little of this rise can be attributed to improved technology. Some exceptions to this, however, should be noted. In Mexico there is an increase in crop yields, largely due to irrigation. Rice yields are up about 100 per cent in Peru, and potato yields are up around 30 per cent for the whole region.

Looking at the world picture in total, therefore, technical changes, plus increased resources in use in agriculture, currently produce a larger total output of farm products than before the last war. These factors have enabled the world's farmers to recover the decline in production caused by the war and to meet the needs of a 20 per cent population increase. This is a remarkable achievement, when all the factors are taken into account.



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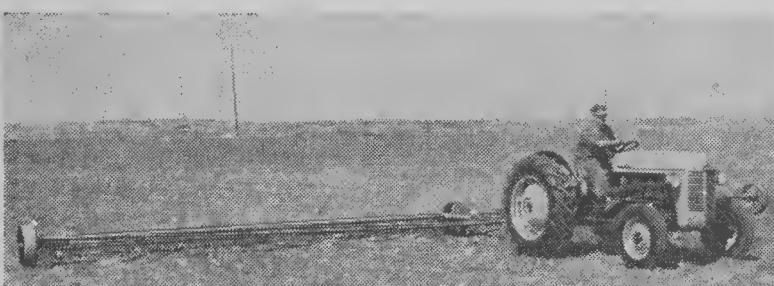
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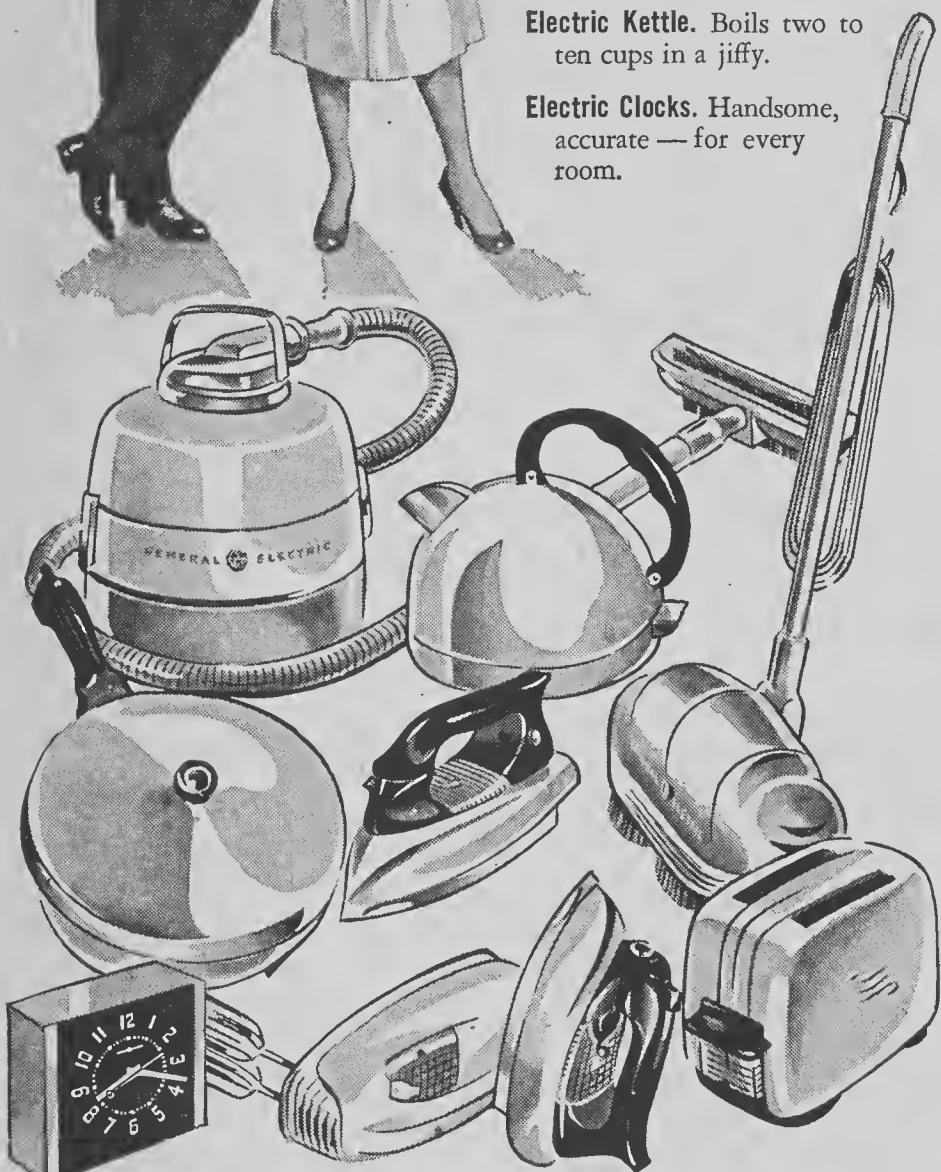
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Production of food has more than kept pace with population increase. Per capita agricultural production today is about 102 per cent of pre-war. This is a recovery from about 85 per cent in 1946-47. While average per capita total food intake is only at, or near pre-war levels for all regions, this, too, is a recovery from levels that were down about 30 per cent or more, for most of the world's population, in the immediate post-war period.

THE review of agricultural production presented herein, helps to explain the reasons for the total increases in production of farm products and the presence of surpluses for some of these products that we now experience. Increases are in evidence everywhere. In some regions, and in some countries, they are the result primarily of increased use of resources. In others they are primarily the result of technical change. In the more advanced countries the increases are a combination of both. A recent study of Canadian agriculture indicates that of the total increase of 35 per cent in farm output experienced since before the war, two-thirds of it is the result of technical change and one-third is due to other factors.

The conclusion suggested by this review is that there is a large potential for production among the farms of the world. Technology can, and does, play an important role in the development of this potential. Technology is cumulative in its effect. The current mass of information dealing with the means of agricultural production will be put into practice at an accelerating rate among the farmers of the underdeveloped regions, and will result in increasingly greater production. The speed at which these practices will be adopted will depend largely upon the extension of the educational process among these people, and the flow of capital to them. Interest and action on both of these matters is being taken by the individual countries concerned and by international agencies.

(Note: Professor Sinclair is head of the Department of Agricultural Economics at the University of Manitoba. Material for this article developed out of an international conference of agricultural economists which Professor Sinclair attended this year in Helsinki, Finland.—ed.)

Federal-Provincial Conference

Continued from page 7

almost identical with that of the Canadian Federation of Agriculture. He had, in fact, quoted from Sub-section 2 of Section 9 of the Agriculture Prices Support Act, the government idea, which he said "is more helpful than saying parity, which can mean many different things." Sub-section 2 reads that ". . . the Board shall endeavor to ensure adequate and stable returns for agriculture by promoting orderly adjustment from war to peace conditions and shall endeavor to secure a fair relationship between the returns from agriculture and those from other occupations." It is worth noting in this connection that for the years 1943-45 the ratio of prices received by farmers to the prices paid by them, averaged about 101, and that in September, 1955, the ratio had

dropped, according to the C.F.A., to 81, or three points below the corresponding figure for 1939, and 32 points below the peak post-war figure for 1948. Also, it is 20 points below the average for the Board's base period, 1943-45. Mr. Gardiner said that "Sub-section 2 does state what most Canadian farmers desire," and added that "it may even be a proper definition of parity to them."

A useful comment was made by J. G. Taggart, Federal deputy minister, when he suggested that there is probably a greater disparity between incomes within agriculture, than between agriculture and non-agricultural industry. He divided farm products into three categories. One of these, which would include milk and most dairy products, is characterized by fairly stable prices. The second included wheat, as well as some fruits and vegetables, where risk is inherent in the production of the commodity and where the volume varies widely due to natural causes. In the third group of commodities, variation in production may be considerable within comparatively short periods. This group includes poultry, eggs, hogs and the major cash crops, in all of which considerable variation is due to the decision of individual farmers. No one, said Dr. Taggart, has wanted to tell the farmer what he should do about such items. Nevertheless, he thought that outlook information and forecasts probably proved most valuable for commodities in this group.

THE Conference seems to have become more interesting in recent years, doubtless because of the relative decline in farm income and the threat of surpluses, which lend a note of urgency to the outlook aspect of the event. One of the important purposes served by the Conference is that the exchange of viewpoints and opinions between representatives of ten provinces is inevitably of value, as well as the explanation of particular problems and disabilities associated with any province.

The foundation of the Conference lies, of course, in the many carefully prepared reports which have been put together by committees of federal officers. These embody appropriate current information and facts intended to be helpful to Canadian farmers in planning their operations for the following year. Sometimes the dry facts of a report are relieved by a little amusement such as happened with a report on one crop, in which it was said that "the size of the 1956 crop will be largely determined by the acreage planted and the yield obtained." One could conclude that this report was prepared late at night—and might be correct.



"D'you want to fall off there and break a drumstick?"

The Countrywoman

by AMY J. ROE



A little girl's delight in a doll is the same in any age or in any clime.

The doll is one of the most imperious necessities, and at the same time one of the most charming instincts of female childhood. VICTOR HUGO, in his classic novel "Les Misérables," 1862—concerning Cosette.

Mostly About Dolls

RIIGHTLY, perhaps we should be done with the subject of dolls, now that another Christmas has come and gone. Yet somehow this year, after-thoughts have crowded in concerning little girls and their dollys, stirred possibly by the article in this issue, written by Vincent Edwards about a famous collector of dolls. All about us, at the time of writing January copy in advance, are evidences of charitable efforts to provide cheer for the less fortunate. Press stories and photographs abound showing various groups at work, packing hampers, at work mending, making dolls or other toys to go out to homes where there are children.

We are again reminded that a doll for a child, not only serves its immediate purpose of bringing joy but fulfills a function of telling a story of a people and of an age. The little girl dresses and tends her dolly, imitating her mother's ways of doing things for her children—thus, during young and tender years, setting the pattern of family and folk ways. To the undiscerning adult, who may have "lost the ways of childhood" a doll may be only a trifle, a mere toy. To a child it may be a sheer joy, a dream fulfilled. To many a grown woman, an old doll, or one found hidden away in a secret place, unfolds warm and treasured memories, such as are aptly expressed in a verse from "Water Babies," by Charles Kingsley:

*I once had a sweet little doll, dears,
The prettiest doll in the world;
Her cheeks were so red and so white, dears,
And her hair was so charmingly curled.*

Two recent books recalled, gave touching incidents concerning a little girl's feelings about a doll. The first, appears in Richard Harrington's "The Face of the Arctic," published 1952, by Henry Schuman, Inc., N.Y. The author, known to readers of The Country Guide, is Canada's outstanding documentary photographer. His work has taken him into far corners of the world. In this book he concerned himself with telling the story of the Eskimo, revealing by beautiful photographs the Eskimo in his northern setting, at work and at



{Richard Harrington photo}

minds one of the twitching of a rabbit's nose. I have seen little babies still packed by their mothers, express disapproval like that."

The second incident is related, somewhat casually among childhood experiences, by Jacqueline Cochrane in her life story "Stars At Noon," published 1954. In an epilogue the author says: "This book has been written primarily for the millions of our youth today who have the frustrating feeling that yesterday's children had more opportunity, tomorrow's generation may have things better, but today is tough . . . Every generation has its rough roads and its barriers to surmount . . . My story went from sawdust to stardust. Only because of this is it written."

THE publisher, Little, Brown and Company of Boston, proudly testifies to the high accomplishments of Jacqueline Cochrane in the field of aviation. She was awarded the International Flying Organization's gold medal in 1953 for outstanding accomplishment by any pilot—man or woman. Today she owns three cosmetic firms and in 1953 was chosen the Business Woman of the Year.

Acting as wingman to the book's production, her husband, Floyd B. Odlum, himself a world-famous aviator, pays loving and loyal tribute, pointing out that her background and beginning only make these aerial feats more remarkable. "That little girl, now grown up in some ways but not all, is the author of this book. She is also my wife and the most interesting person I have ever met." Attempting to describe "the many sides of her character and personality, some of which seem to contradict the others," Floyd Odlum continues: "I have said that Jacky is fearless, and yet she runs wildly from a snake, and I have seen her become almost hysterical from listening to a good old-fashioned ghost story. However, I have never seen her back away from real danger and I have constantly observed that she moves automatically toward the center of trouble. Certain it is that she is fearless of death and equally certain it is that she considers a barrier only something to surmount."

Concerning a little girl's joy in possession of a doll and the long, long memories of childhood as revealed by a grown woman's story

home and by a simple direct style of text interprets these to the reader. On the Eskimo family, Richard Harrington tells us of the relationship between parents and children and remarks that the behavior of the Eskimo child is good.

Of one particular child Annie Tadedluk, also well behaved, he writes: "I ended up on the bad side of her. Seeing her playing with a doll—an Eskimo doll, dressed exactly like the child herself, in ground

squirrel furs and wolverine tags—I asked her mother where I could get one like it. The mother politely offered me Annie's. Seeing this Annie's eyes clouded and she wrinkled her nose at me, then hid behind her mother, sulking. I declined the gift, but Annie still held it against me that I had coveted, as she thought, her precious doll . . . The gesture of wrinkling up the nose is a typical one in Eskimo children, when they are put out at something. It is so brief and fleeting—it re-

In Canada Jacqueline Cochrane is perhaps best known as the first woman ferry-pilot on this continent to fly the Atlantic during the last war. It may be well to recall her other outstanding feats: the first woman to make a totally blind landing in a plane; the first woman to pass the sonic barrier and exceed the speed of sound; the woman who led men in numerous speed flights over a period of two decades.

In her life's story Jacqueline Cochrane tells of dinners with royalty and with four different presidents of the United States, with Winston Churchill and other leading figures in church, state and the business world. Yet somehow—but perhaps because she went on to these honors, it is her childhood story that lingers in one's mind. It is best conveyed in the opening chapter of "Stars At Noon":

UNTIL I was eight years old, I had no shoes. My bed was usually a pallet on the floor and sometimes just the floor. Food at best consisted of the barest essentials—sometimes nothing except what I foraged for myself in the woods or the waters nearby . . . No butter, no sugar. My dresses, in the first seven years of my life were usually made from cast-off flour sacks.

"That was my life in the sawmill towns of northern Florida when I should have had toys and been getting a schooling. It was bleak and bitter and harsh. But it taught me independence and the necessity of fending for myself. Particularly did I grow independent when at the age of six I overheard by chance a conversation in which 'Mama' was engaged with another woman which disclosed to me the secret that I was not one of the family, but by a promise made I was never to know this. 'Mama' was slovenly and lazy . . . the knowledge that I did not belong to her gave me a sense of happiness and exhilaration."

At seven years she was earning small sums carrying water for women to use for washing, and staying with an 18-year-old expectant mother, whose husband was back in the woods logging. On a rainy night the young mother decided "she could get along until daylight. But she didn't. I boiled water, took directions from her and acted as a midwife."

There was a doll in the commissary store—to be won on a lucky coupon. "With fifty cents earned I went to the commissary and said that I would like two tickets on the doll. They gave me some toys too, but most of all I got the two coupons which I dropped into the box. On Christmas eve, wonder of wonders, I won the doll. My older 'sister' had married when she was about 15 and had a two-year-old baby. 'Mama' and 'Papa' took the doll away from me and gave it to the baby, whose name was Willa Mae. It broke my heart."

Things were going badly on Sawdust Road. Reports were that there was a boom in cotton mill towns in Georgia. So the family moved, found a house, acquired some bedding and a stove—"All on credit. I went to work immediately in a mill . . . At eight years of age, I became self-supporting and was on my way to independence. I had no shoes but I had dreams."

Years later when Willa Mae was grown up and had a child of her own, Jacqueline, who on many occasions in the intervening years had rendered aid to her so-called "family," now brought Willa Mae and her child to New York: "to give them a new and better start in life. But on the condition that they bring that doll along and surrender it. I have the doll now, slightly refurbished and with new clothes. That doll represents a great deal to me—and it has several other dolls for company."

"I have," writes Jacqueline, "a memory like an elephant and a wrong is something to be righted." ✓

A January Packet

Miscellany of ideas on various topics by friendly contributors

Winter Washday Line

by J. MARION NICHOLSON

WHEN winter clasps the countryside in its churlish grasp, hanging out the weekly wash becomes a problem.

With keen cold nipping at stiff fingers, strong winds threatening to whip the wet clothes aloft, and snow-drifts looming up to bar the way, there comes a new temptation to dry the washed clothes indoors.

Then follows thoughts of the pleasant outdoorsy smell about the ironing basket after a spell in the fresh air; the satisfying, whitening touch of sparkling frost and sunshine on the linens, after hanging outside.

The only solution appears to be to adopt washday habits that suit our cold weather conditions. The following ideas include some short-cuts and well-proven methods we have tracked down in our search for a compromise with Old Man Winter on frigid washdays.

For finger comfort in subzero weather, wear woollen gloves when you are putting out the wash. Keep a pair of white, or clean, color-fast warm gloves in your pin basket, and you need never suffer from numbing cold, if you put them on before hanging your clothes, and when bringing them in, stiff as boards, at the end of the day.

Ask your butcher for a big flat basket for your clothes. The advantage of a big basket is that you can lay out the bulky things, your sheets, pillowcases, towels, dishtowels, and folded tablecloths, flat and smooth, with the corners of each article on top. Then, when you are standing out in the cold, lifting them to the line, you will appreciate the ease with which you can find the corners for pinning.

If you use steaming hot water for the final rinse, and warm starch dip in wintertime, you will find that the clothes stay pliable for hanging. To hinder wet clothes from sticking to the cold metal line, wipe your clothesline with a cloth that has been tightly wrung out of strongly salted water.

When windy blasts come sweeping across open fields, sheets, tablecloths, and other large items are apt to tear at the corners. You can prevent this by hanging them so that one-third of each article hangs evenly over the line, instead of pinning them at the corners. This method also prevents them from sagging, and dragging in high snow-drifts.

It takes patience to pin up the smaller items, the facecloths, handkerchiefs, table napkins, and such, on a blizzard day. You can cut this cold chore in a fraction by pinning them to a piece of tape before leaving your warm kitchen. All you have to do out-

side is to pin the tape at intervals to the line.

If you are solicitous of the well-being of housecoats and dresses which you have washed, in bitter weather hang them on wooden or rustproof wire coat hangers before you go outdoors. If the hangers tend to bunch together, you can use a spring clothespin to anchor each hanger separately on the line.

The manufacturers of slips and nightgowns suggest that in windy weather these delicate garments should be hung by the hems with the clothespins placed at the side seams where the garments are strongest.

If you have sock stretchers, you will find them a timesaver on getting out a wash on a cold day. The socks are fitted over the stretchers in the house, and then each pair of stretchers is quickly flipped over the line.

A high pulley line is the sensible type of line to have for our northern winters, when snowdrifts lie deep and long. It may not be as picturesque as the clotheslines which the landscape designers sketch in pretty grassy dry-ing-yards, but when you are freed from wading through deep snow with a load of clothes under your arm, you

appreciate the pulley line for its utility, and you forget its lack of good design. In bitter weather, if at all convenient, try to get your wash on the line early in the day to give the too-short sun a chance to do its good work.

Aside from the benefits that the bracing winter air gives to the weekly wash, you will find that there is the personal lift, the sense of exhilaration, and the pride of accomplishment that comes when you battle the elements bravely and efficiently. ✓

Indoor Game

FOR plate ball the players are divided into teams and a string is stretched across the room as a dividing line. A small, light rubber ball is provided and each person is given a paper plate. One person tosses the ball to the other side. If it is caught on a plate it scores five for that side. If they fail to catch it, the score of five goes to the tosser. The ball must be handled the way one would handle a pie, that is, it must be tossed from the plate with both hands as if one were tossing a pie, and the other side catches it with the plate held level in both hands. There's a lot of fun in this game. It can be played with rules similar to tennis, but always in pie-catching manner, not as if one were handling a tennis racquet. — E. Content. ✓

Encouragement Helps

Praise for the handyman at work

PERHAPS the man of the house, be he husband or son, is a natural born "fixer." On the other hand, he may be skilful but somewhat reluctant to get started on jobs, which the average housewife wants done about the place. The wise woman never nags. She does know that encouragement and praise help. She will have the materials and tools ready, perhaps also an illustrated clipping or a sketch plan of the job. The suggestion registers with him and at the right moment and he decides to get on with the job, whether it be putting in shelves, covering a work surface or building a cabinet.

Stay near at hand, chat cheerily about subjects, in which he is interested or bring the radio into the kitchen or bedroom, where the job is in progress. He can work as he listens in to his favorite mystery story, play, hockey or other game. Make a pot of coffee or a pitcher of lemonade so that he may quench his thirst, when he



Make a point of praising the worker and job.

stops for a "breather." We all like company and we all respond to praise.

Satisfaction with the finished job is tinged with the memory of the pleasantness of the period spent doing it. It is well to remember these little but important points when handy Andy is good enough to do some household fixing jobs for you. The chances are that he would much rather be reading or just pleasantly relaxing.—L.P.B. ✓

The Grandma Box

by MARJORIE FORRESTER

SOMETIMES an idea comes on the spot at a certain moment, and works out surprisingly well. The setting-up of my "Grandma Box" was an example of this.

It originated when I was housecleaning. I was working in what we always called "the girls' room." A bottom drawer of the bureau was jammed with an out-dated miscellany. I needed that space for the storage of things in use. What outrageous junk they did gather up! My eye had fallen on a blue plastic backscratcher in the form of a long thin arm and clawed hand. There was a pair of Chinaman's shoes which my father had brought from Vancouver and bits of old masquerade costumes showing evident signs of having been played with, over two generations.

I unrolled a couple of small dainty mirrors, carefully wrapped in tissue paper. I remembered the delight of our two little girls when an elderly friend had presented them. There were beads, bracelets and broaches. There were two small canoes, a papoose in a birchbark moss bag, a mouth organ, several old watches and a variety of china ornaments. Destroying or discarding the accumulation seemed more and more impossible as memory crowded upon memory. Perhaps our own grandchildren might enjoy them a few years hence. That settled the matter for me!

I found a large covered box—an old trunk with a tray would have been better. Into the box went all the old keepsakes and souvenirs of our family. It seemed such a short time ago, that our children had cherished and carried these things about.

Some day I am going to label a few of the most treasured articles, noting the owner's name and the occasion on which it was acquired or given. In time too, they will be arranged in better order so that we may find them quickly if needed. So often things are just forgotten—when they could be put to use at a party or some "dress-up" occasion. Young nephews, nieces and neighbors' children delight in being permitted to delve into my Grandma Box and to deck themselves out, in old-fashioned objects. To date, every child who has entertained himself examining the contents has brought down the blue backscratcher to "show to Mama."

I was thinking of my grandchildren, when I set up the box, but they are still too young to get much enjoyment out of exploring it. When the day comes that a grandchild of ours comes downstairs, wearing a fancy beaded gypsy bolero, a Roy Rogers button, carrying lady's outsized handbag in one hand and something in the other and asks: "What's this thing for Grandma?"; I'll know, without looking up, that it will be the backscratcher he is holding aloft.

"BAKE-TESTED"

Robin Hood Flour

guarantees best results!

Use ONE flour
for ALL your
baking

QUICK DATE AND NUT BREAD

2 cups sifted Robin Hood
Vitamin Enriched Flour
4 teaspoons baking powder
 $\frac{1}{2}$ teaspoon salt
 $\frac{1}{2}$ cup granulated sugar
 $\frac{3}{4}$ cup broken nut meats
1 cup chopped dates
1 tablespoon grated orange rind
(may be omitted)
1 egg, well beaten
1 cup milk
2 tablespoons melted butter or shortening

Grease an 8 x 5 x 3 inch loaf tin thoroughly. Sift together flour, baking powder and salt into mixing bowl. No guessing or experimenting when you use Robin Hood Flour . . . It's

"Bake-Tested" to give you *uniformly best* results, bag after bag.

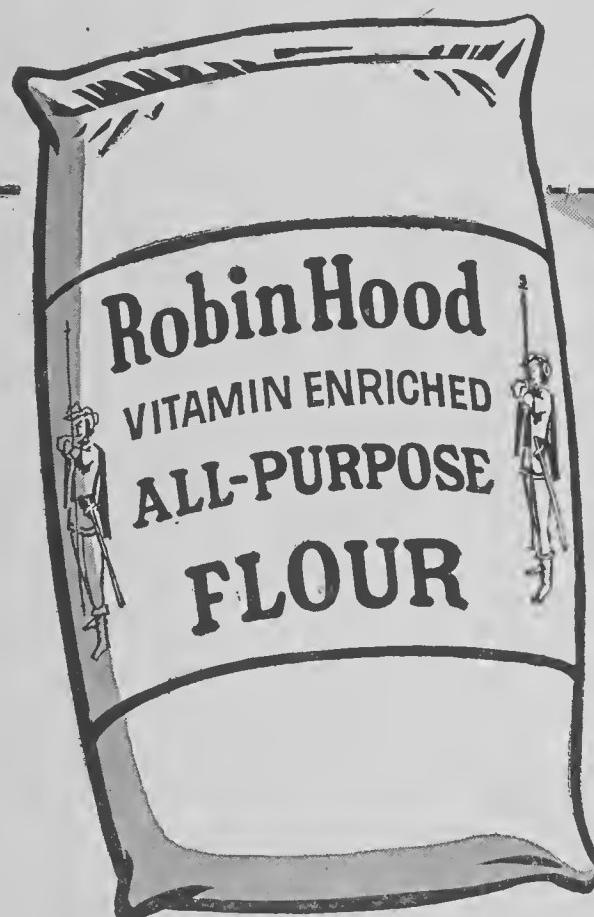
Add sugar, nuts and dates. Mix well. To beaten eggs add milk and melted butter or shortening. Add to flour mixture. Mix just until blended.

You'll find Robin Hood Flour always blends smoothly, perfectly . . . because it's a true All-Purpose Flour, milled from a *variety* of choice wheats to supply the exact qualities needed for *everything* you bake.

Turn mixture into greased loaf tin and allow to stand for 20 minutes.

Bake at 350° F. (moderate oven) for 55 to 60 minutes. Bake in centre of oven on middle rack. Turn out on wire rack and cool for several hours before slicing.

Good the first day — better the second!
Best you've ever baked, in fact, or your money back — plus 10 percent!



Robin Hood

Canada's fastest selling Flour-by far!

←
BANDED BAG: of fine quality cotton . . .
paper label soaks off in minutes —
no ink to wash out.

Tune in "The Happy Gang"
Monday through Friday
See newspaper for time and station.

Savory Stews

Spicy seasonings add interest and zest to meat dishes on cold, wintry days

SHARPLY flavored foods served steaming hot have a special appeal on cold and blustery days. Added spice or other tangy seasoning serves to heighten our enjoyment of stews during the winter season. The wise homemaker avoids the possible critical remark "Oh just stew" by preparing them in unusual ways and by selecting different ingredients.

Variation comes in the kind of meat used, the added vegetables, liquid, and seasoning. Veal, lamb, beef or a mixture provides the basis for a delectable stew. Seasoning may be varied by using a dash of curry, a touch of marjoram or onion. For a truly spicy concoction, use a dash of chili powder and a few drops of Worcestershire sauce.

Stews are economical as they are delicious. Less expensive cuts from the neck, shoulder, shank and breast make tasty dishes. The flavor comes partly from the soluble meat substances known as "extractives." Since the larger percentage of extractives is found in the tougher, inexpensive cuts of meat they are usually the most flavorful. Much of the flavor is developed in the process of cooking.

The method is to simmer gently in sufficient liquid to cover meat and vegetables. The moisture tends to soften the connective tissue present in these cuts making the meat more tender and delicious. Try adding milk, thinned cream of mushroom or cream of celery soup, pineapple juice, tomato juice or chicken broth and then cover with water to provide the required amount of liquid. A good proportion is one cup of soup or juice to five cups of water. Vegetables should be added later in the order of their cooking time, keeping in mind that they should be cooked only until tender.

Since the vegetables are in the stew, a side salad of crunchy, raw cabbage would be relished. In place of potatoes serve fluffy steamed rice. These with light, hot buttered biscuits provide a nutritious, satisfying meal.

Veal Stew

1/8 lb. salt pork	1 c. peas
2 lb. veal breast	1/2 green pepper
2 tsp. salt	2 T. flour

Cut salt pork into cubes and fry until lightly browned. Add veal, cut in small pieces and brown. Cover with water (about 6 c.), add salt and cover closely. Simmer 2 hours. Add peas and chopped green pepper. Thicken gravy with flour stirred into a little cold water.

Transylvania Stew

2 small firm white cabbages	Bouquet of dill, marjoram and parsley
2 lb. lean stewing beef	1 c. soup stock
Salt	4 T. thick sour cream
Pepper	
2 tsp. vinegar	

Cut the cabbage into wedge shaped pieces and cook in boiling water for half an hour. Cut meat in small pieces and brown lightly in frying pan. Drain cabbage and press out all water possible and put the pieces in an oven dish. Add meat and pour on the stock. Put in herbs and vinegar and cook in a slow oven (250° F.) for an hour. Just before serving stir in sour cream.

East India Curry

2 lb. veal shoulder	2 c. corn or other vegetables
3 medium-sized onions	1/2 c. canned tomatoes
2 T. fat	2 tsp. salt
3 T. curry	2 apples

Slice onions and cook in fat until yellow. Stir in the curry powder and cook 5 minutes. Then add meat, cut in 1-inch pieces, the tomatoes, diced apples, corn and salt. Cover with boiling water and simmer gently for 3 hours.

Veal Paprika

2 lb. veal stewing meat	2 T. fat
1 tsp. salt	1 1/2 c. hot water
1/8 tsp. pepper	3/4 c. sour cream
1 tsp. paprika	1 bay leaf

Sprinkle veal, cut in cubes with seasonings. Roll in flour. Sauté the floured meat until browned. Add water and bay leaf. Cover and simmer 1 hour. Add cream and paprika. (One can of mushrooms with liquid may be added for special occasions.) Serve in ring of noodles. Sprinkle with poppy seeds. Serves 6. V



Vegetables and juicy meat flavors blend to produce a colorful and tasty stew.

4 Danish Bun Treats from One Basic Dough!

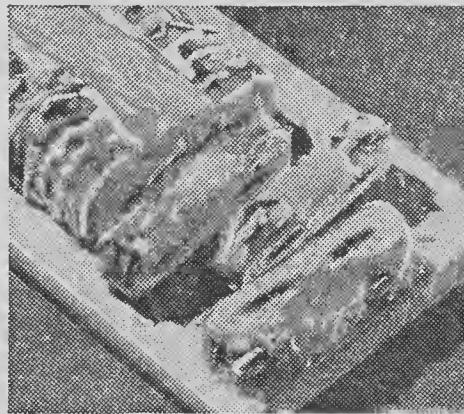
1. Apricot Turnovers



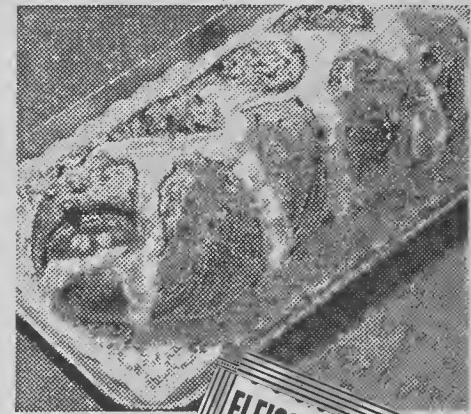
2. Raisin Rounds



3. Jam Strips



4. Cinnamon Braid



For Luscious Variety use New Active Dry Yeast

This rich Danish Bun Dough rewards you with 4 gorgeous treats out of the same oven! Successful risings with Fleischmann's Active Dry Yeast are the secret! So whenever you bake at home, be sure you have Fleischmann's on hand.



Needs No
Refrigeration

BASIC DANISH BUN DOUGH

Measure into a small bowl

1 cup lukewarm water
3 teaspoons granulated sugar

and stir until sugar is dissolved.

Sprinkle with contents of

3 envelopes Fleischmann's Active
Dry Yeast

Let stand 10 minutes, THEN stir well. Sift
together twice, then sift into mixing bowl

6 cups once-sifted bread flour
1/2 cup fine granulated sugar
1 teaspoon salt

Cut in finely

1 pound chilled butter or margarine

Beat together until light and thick

2 eggs

1 egg yolk

and stir into yeast mixture.

Make a well in the flour mixture and pour in
yeast mixture; combine thoroughly. Knead
dough in the bowl until smooth. Cover dough
closely with waxed paper and chill.

Beat together slightly with a fork and hold to
finish fancy doughs,

1 egg white

1 tablespoon cold water

Turn out dough on lightly-floured board.

Divide into 4 equal portions and finish as
follows:

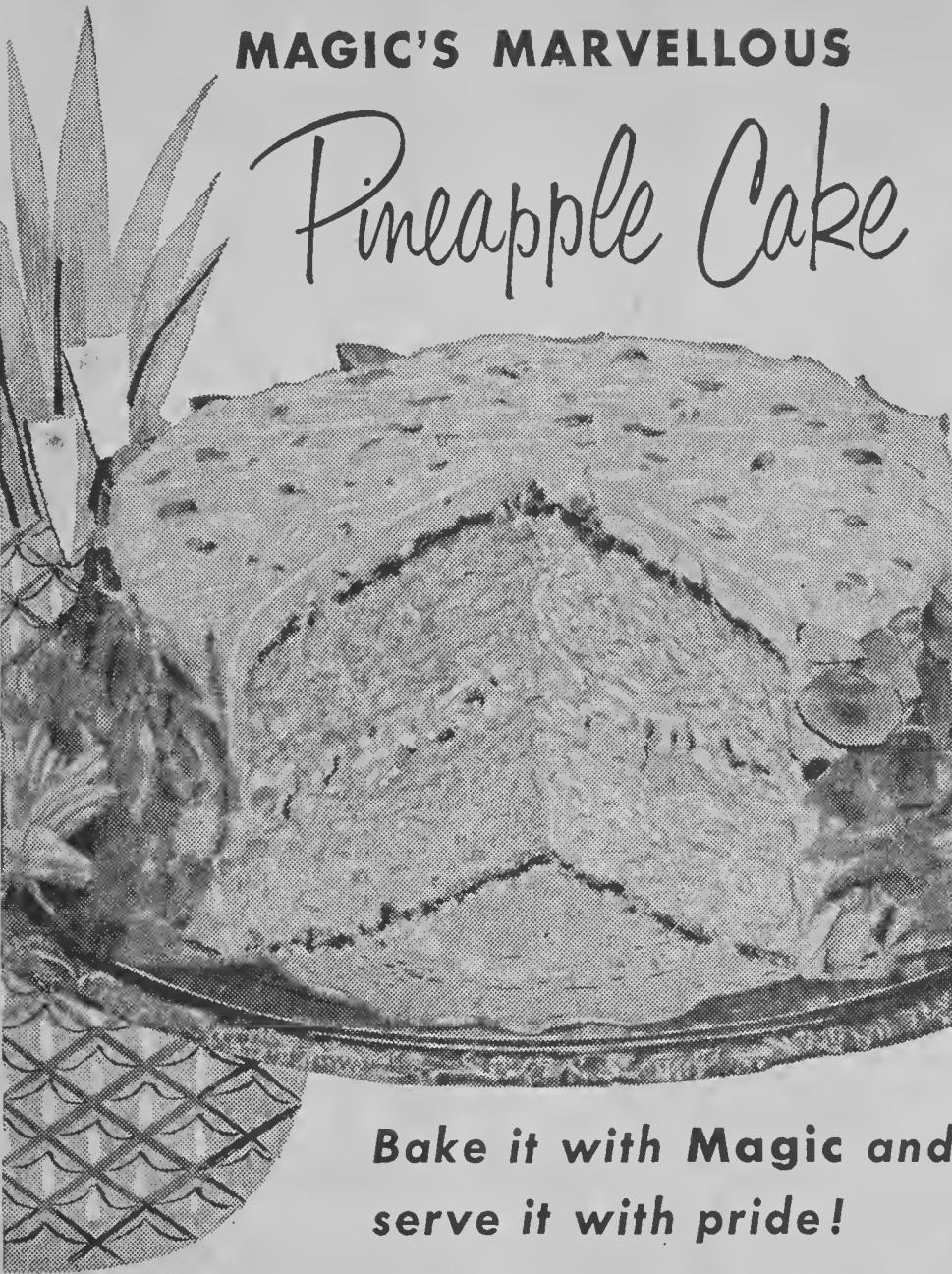
1. Apricot Turnovers. Roll out dough to 9 x 12 inches. Cut into 12 squares; moisten edges. Put spoonful of apricot jam on each square; fold into turnovers; seal; snip tops. Place on greased cookie sheet. Cover. Let rise in warm place 15 mins. Brush with egg-white mixture; sprinkle with chopped almonds and sugar. Bake in moderately hot oven, 375°, 20 mins.

2. Raisin Rounds. Cream 2 tbsps. butter; mix in 1/4 cup brown sugar, 1 tbsp. flour, 1 tsp. grated lemon rind and 2/3 cup raisins. Roll out dough to 1/4-inch thickness; cut into 2 1/2-inch rounds. Moisten edges of half the rounds with water; place spoonful of raisin mixture on each one; cover with remaining rounds; seal; cut an X in top of each round. Place on greased cookie sheet. Cover. Let rise in warm place 15 minutes. Brush with egg-white mixture; sprinkle with slivered nuts and sugar. Bake in moderately hot oven, 375°, 18 to 20 mins. Frost while hot, if desired.

3. Jam Strips. Roll out dough to 5 x 15 inches. Run strip of 2 tbsps. thick jam down each side, 1 inch in from edge. Moisten edges and fold over jam to meet in center; seal. Place on greased cookie sheet. Cover. Let rise in warm place 15 mins. Brush with egg-white mixture; sprinkle with slivered nuts and sugar. Bake in moderately hot oven, 375°, 25 to 30 mins. While hot, spoon thick lemon filling down center. Drizzle with frosting.

4. Cinnamon Braid. Combine 1/3 cup sugar and 1/2 tsp. cinnamon; sprinkle all but 2 teaspoonsfuls on baking board; place dough on board; roll out to 9 x 14 inches; fold dough over twice. Repeat rolling and folding twice. Roll out dough to 4 x 16 inches; cut into 3 long strips, joined at one end; braid. Place on greased cookie sheet. Cover. Let rise in warm place 15 mins. Brush with egg-white mixture; sprinkle with 2 tbsps. chopped almonds and 2 tbsps. sugar mixture. Bake in moderately hot oven, 375°, 30 mins. Spread hot braid with frosting.

CONFECTIONER'S FROSTING: Combine 1 1/2 cups sifted icing sugar, 2 1/2 tbsps. milk and 1/4 tsp. vanilla.

MAGIC'S MARVELLOUS**Pineapple Cake**

**Bake it with Magic and
serve it with pride!**

SUNNY ISLETS of golden pineapple in a creamy sea of fragrant frosting . . . a tropical topping for the light, clinging texture and flavor filling within.

And it's your success as well as Magic's—this dream of a Pineapple Cake! For—you made it yourself!

Yes, in all your baking you can depend on Magic for praise-winning results. Check your supply of Magic Baking Powder before you shop this week.

Costs less than 1¢ per average baking

**MAGIC PINEAPPLE CAKE**

- | | |
|--|--------------------------------------|
| 8 tbsps. quick-mix shortening
(at room temperature) | ½ tsp. salt |
| 2 cups once-sifted
pastry flour
or 1 ¾ cups once-sifted
all-purpose flour | 1 ¼ cups fine granulated
sugar |
| 3 ½ tbsps. Magic Baking
Powder | ¼ cup syrup from canned
pineapple |
| | ½ cup milk |
| | 1 tsp. vanilla |
| | 2 eggs |

Grease two 8-inch round layer cake pans and line bottoms with greased paper. Preheat oven to 375° (moderately hot). Measure shortening into mixing bowl. Sift flour, Magic Baking Powder, salt and sugar together once, then sift over the shortening in the mixing bowl. Add the syrup from canned pineapple, milk and vanilla. Beat with a mixing spoon for 300 strokes. Add the unbeaten eggs and beat another 300 strokes. Turn into prepared pans. Bake in preheated oven about 25 minutes.

VIENNESE PINEAPPLE FILLING AND FROSTING: Turn into upper pan of double boiler 2 egg whites, 1 cup granulated sugar and 3 tbsps. syrup from canned pineapple; stir until sugar is partly dissolved. Place over boiling water and cook, beating constantly with rotary beater, until frosting will stand in peaks—about 7 minutes. Remove from heat and beat in ½ tsp. vanilla. Cover pan with a wet cloth and cool mixture completely. Cream ½ cup butter or margarine until very soft; add the cooled icing, a little at a time, beating with mixing spoon after each addition until frosting is blended and creamy. Take out about ¾ cup frosting and fold in 2 tbsps. well-drained finely-cut canned pineapple and ¼ cup toasted chopped Brazil nuts; put cold cakes together with this mixture. Fold ¼ cup well-drained finely-cut canned pineapple into remaining frosting and use to cover top and sides of cake. Decorate sides of cake with toasted thinly-shaved Brazil nuts or sprinkle liberally with shredded coconut.

Oatmeal Favorites

Enticing and different ways of using oatmeal to produce fancy and practical food items

by PHYLLIS A. THOMSON



For a delicious dessert serve Apple Crisp, with brown sugar and oats topping.

OATMEAL plays an important role in meal planning apart from breakfast. Taste-tempting cakes, cookies, desserts, bread and other items may be prepared using this healthful ingredient. If your Johnny won't eat his bowl of oatmeal porridge there are other enticing foods containing oatmeal that will provide him with the essential nutrients. Freshly baked oatmeal cookies or date-filled jumbles will soon disappear if Johnny and other menfolk find the cookie jar.

Scientific findings remind us that oatmeal is a rich source of inexpensive protein, Vitamin B₁ (thiamine) which is necessary for healthy nerves and a normal appetite. It provides blood-building iron and is a good source of ready food energy. For generations Scots have regarded oatmeal in a class by itself. The stamina and vigor of Scottish people surely affords evidence that their food habits have been good.

During the 30 centuries since oats were first developed as a domestic crop, considerable refinement has taken place. Oats are now available to us in two forms—the familiar old-fashioned rolled oats and newer, quick rolled oats. Both forms are whole grain with only chaffy husks removed. The bran and germ of the oats are retained in their entirety. In the manufacturing process, oats are cleaned and washed many times. After a toasting treatment to increase the natural flavor, the oat kernels are steamed and passed through heavy steel rollers, producing old-fashioned rolled oats. For the quick cooking variety, each groat or kernel is cut into several pieces, then rolled into small, thin flakes. This thinness permits the steam to penetrate the oat kernel more quickly.

Chocolate Dipped Surprises**Cookies**

- | | |
|---------------------------|----------------------------------|
| 1 c. butter | 2 c. flour, sifted |
| ½ c. confectioners' sugar | ½ tsp. salt |
| 2 tsp. vanilla | 1 c. quick rolled oats, uncooked |

Cream butter; add sugar gradually and cream until fluffy. Add vanilla. Sift together flour and salt; add to creamed mix-

ture, mixing thoroughly. Stir in rolled oats, mixing until blended. (Dough will be quite stiff.) Shape dough to make logs, balls or cones. Bake on ungreased baking sheet in a slow oven (325° F.) 25 to 30 minutes; cool.

Quick Chocolate Dip
2 6-oz. pkgs. chocolate chips ¼ c. milk

For the chocolate dip, melt the chocolate chips in top of double boiler. Add milk and beat with rotary beater until combined. Dip the cooled cookies into the chocolate. Sprinkle with chopped nutmeats or shredded coconut. Place on a wire rack to drain. Store in refrigerator. Makes 3 dozen cookies.

Apple Crisp

- | | |
|---------------------------|----------------------------|
| 4 c. apples (4 to 6 med.) | 1 c. rolled oats, uncooked |
| 1 T. lemon juice | ½ tsp. salt |
| ½ c. sifted flour | 1 tsp. cinnamon |
| ½ c. brown sugar | ⅓ c. melted butter |

Place sliced cooking apples in greased shallow baking dish. Sprinkle with lemon juice. Combine dry ingredients; add melted butter mixing until crumbly. Sprinkle crumb mixture on top of apples. Bake in a moderate oven (375° F.) 30 minutes or until apples are tender. Serve warm or cold with whipped cream. Makes 6 servings.

Heavenly Pie

- | | |
|----------------------------|-------------------------------|
| 4 egg whites | 1 c. sugar |
| ½ tsp. vinegar | 1 pt. whipping cream, whipped |
| 1 tsp. vanilla | 2 c. sweetened fruit |
| ¼ tsp. salt | |
| ½ c. rolled oats, uncooked | |

Add vinegar, vanilla and salt to egg whites; beat until frothy. Add sugar very gradually about 1 T. at a time, beating well after each addition. Continue beating until mixture is stiff and glossy. Lightly fold in rolled oats. Place in a mound on greased heavy unglazed paper on baking sheet. Using a spatula hollow out the center and build up the sides to resemble a pie shell. Bake in a very slow oven (275° F.) 45 minutes to 1 hour. Cool for a few minutes then remove from paper. Cool thoroughly and fill with sweetened whipped cream into which fresh or frozen raspberries, strawberries or peaches have been folded. Makes 8 servings.

Bonnie Meringue Tarts: Place meringue in 8 mounds on the paper. Shape each

mound as a little pie. Bake and fill as above.

Year Round Fruit Cake

2 c. brown sugar	2 c. sifted all-purpose flour
2 1/2 c. hot water	1/2 tsp. salt
2 T. shortening	1 c. cut candied cherries
1 pkg. seedless raisins	1 c. rolled oats, uncooked
1 tsp. cinnamon	
1/2 tsp. cloves	
1 tsp. soda	

Combine brown sugar, hot water, shortening, raisins, and spices; bring to boil. Cook 5 minutes. Cool. Sift together flour, soda and salt. Stir into cooled, spicy mixture. Add cherries and rolled oats. Bake in a well-greased 8-inch square pan in a slow oven (325° F.) about 1 1/2 hours.

Store 48 hours or longer before serving. Decorate with citron, pineapple, candied cherries and dots of confectioners' sugar icing. Makes an 8-inch square.

Juicy Meat Loaf

1 1/2 lb. ground beef	2 eggs, beaten
3/4 c. rolled oats, uncooked	2 tsp. salt
1/4 c. chopped onion	1/4 tsp. pepper

Combine all ingredients thoroughly and pack firmly into a loaf pan. Bake in a moderate oven (350° F.) 1 hour. Let stand 5 minutes before slicing. Makes 8 servings.

Variations:

1. Hamburgers: Omit beaten eggs. Shape combined ingredients into 8 hamburgers; chill. Pan-fry in hot fat and serve on buns.
2. Meat Balls: Omit beaten eggs. Shape combined ingredients into 16 meat balls; roll in flour and brown in hot fat. Add tomato sauce and simmer 20 to 25 minutes.
3. Mock Drumsticks: Omit beaten eggs. Shape combined ingredients into 8 drumsticks. Insert a wooden skewer into each drumstick; chill. Roll in bread crumbs. Brown on all sides in hot fat; cover and cook slowly 10 minutes longer.

Oatmeal Yeast Bread

1/2 c. brown sugar	1/2 c. lukewarm water
1 1/2 T. salt	
3 T. shortening	2 pkgs. or cakes of yeast
1 c. scalded milk	3 1/2 to 4 c. sifted flour
1 c. boiling water	
3 c. quick rolled oats, uncooked	

Add sugar, salt and shortening to scalded milk. Pour milk and boiling water over rolled oats; combine well. Let stand until lukewarm. Dissolve yeast in lukewarm water; add to oats mixture; beat well. Stir in flour. (Mixture will be rough in appearance.)

Turn on floured board and knead for 5 minutes, using more flour if necessary. Dough should be smooth and easy to handle. Place in a greased bowl; grease top of dough and cover. Let rise in warm place (80-85° F.) until nearly double in size, about 45 minutes. Punch dough down and divide in half. Cover and let dough rest for 10 minutes. Form into two loaves and place in well greased bread pans (1 lb. size). Grease top of each loaf. Let rise until loaves are nearly double in size, about half an hour.

Bake in hot oven (400° F.) for 10 minutes. Reduce heat to moderate (350° F.) and bake 60 to 65 minutes longer. Remove from pans; brush with melted butter and let cool thoroughly.

Quick Clovers: Roll bread dough to thickness of one inch; cut in one-inch squares. Form each square of dough into a smooth ball; place in greased muffin pans. With scissors cut each ball in half, then in quarters, cutting almost to the bottom so that ball opens out into the form of a clover. Brush clovers with melted butter; cover and let rise until they are nearly double in size. Bake in hot oven (400° F.) for 10 to 15 minutes or until brown. Brush with melted butter. Makes 4 dozen rolls.

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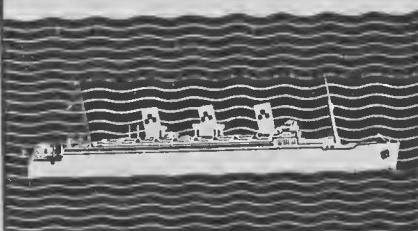
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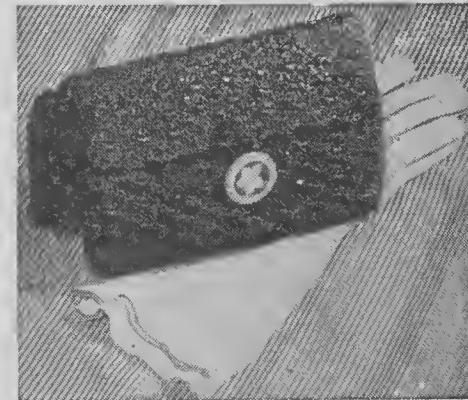
Interesting work for leisure moments in the New Year

by ANNA LOREE



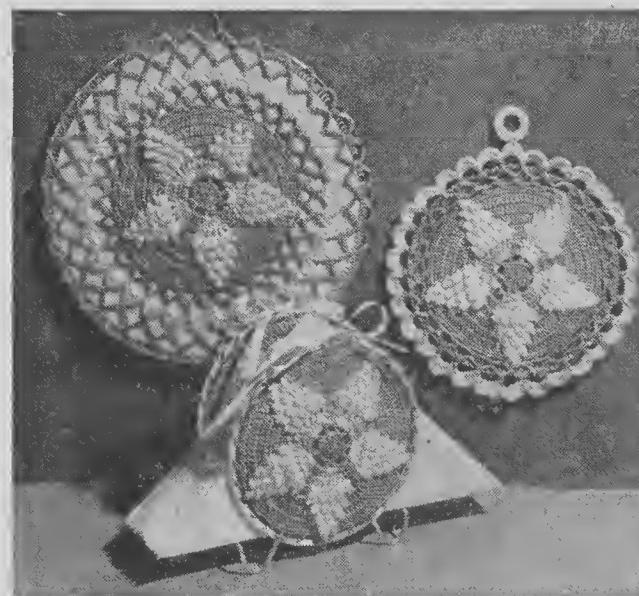
Design No. K-4272

Smooth fitting knitted blouse designed without bulk. Styled on tailored lines to wear with a suit. Round neckline is finished in picot-like stitch, and fastened with small zipper closure to prevent stretching. Yoke has small pretty pattern for soft feminine touch, ribbed effect on sleeves and bodice. Materials: Coats' Best Six Cord Mercer-Crochet No. 10, you will need nine balls. Knitting needles Nos. 14 and 12. Design No. K-4272. Price 10 cents.



Design No. PC-4797

Smart crocheted clutch bag makes pretty accessory for afternoon or evening. Has carrying handle which can be slipped over wrist. Bag and handle are lined with buckram to give firmness. Fasten bag with eye-catching brilliant button for elegance. Materials: Clark's Anchor Pearl Cotton, size 5-8 balls black. Milward's Ship Brand Steel Crochet Hook No. 4. Large jeweled button, $\frac{1}{4}$ yard each of buckram and lining material. Design No. PC-4797. Price 10 cents.



Design No. PD-420

Pineapple popcorn design pot holder, hot plate mat, napkin holder. Crochet in bright kitchen colors. Materials: Clark's Anchor Pearl Cotton size 5 (4 balls first color and 3 balls second color) or use Clark's Anchor Cronita—2 balls first color and 2 balls second color. Also required: wire napkin holder 5 inches diameter, asbestos hot plate mat 8 $\frac{1}{2}$ inches in diameter, bone ring, 3 yards ribbon $\frac{1}{2}$ inch wide, Milward's Steel Crochet Hook No. 7. Design No. PD-420. Price 10 cents.

Design No. 6074

Hexagon motifs form design of this simply crocheted bedspread. A prized possession for homemaker or a gift cherished by special friend or relative. Single size spread (72 by 105 inches) requires 120 balls Clark's Anchor Cronita (white or ecru) double size spread (90 by 105 inches) requires 167 balls. Use Milward's Ship Brand Steel Crochet Hook No. 7. Design No. 6074. Price 10 cents.



Address orders to The Country Guide Needlework Department, 290 Vaughan Street, Winnipeg 2, Manitoba.

Miniature Masks

by NANCY M. BETTESWORTH

HOW about a collection of miniature masks for your room or for the rumpus room? They are effective decorations, and fun to make and can be as life-like or as fantastic as you care to make them.

The materials needed are easy to obtain and inexpensive. You require a small amount of plasticine, some tissue paper, a bottle of mucilage or gum, a very small quantity of Vaseline or other petroleum jelly, and a box of water color paints.

With the plasticine, model the face which you want to turn into a mask. I find that if this model is about the size of a large orange cut in half it is



Diagram I

a good size to handle. Make the nose and mouth as clear-cut as you can, and make fairly deep hollows for the eyes. Diagram I shows a side-view of this plasticine base.

Next, give this base a thin coating all over of Vaseline. Be sure every hollow and shaping is covered, as this is



Diagram II

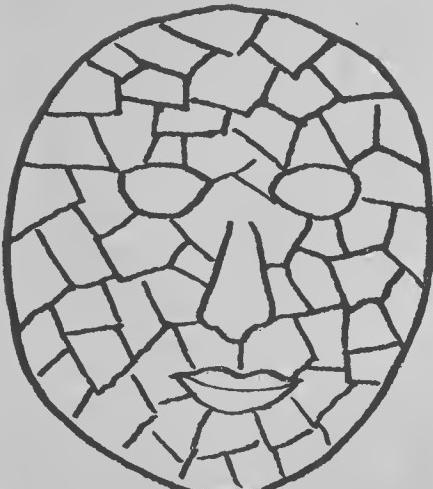
to prevent the mask from sticking to the plasticine.

Now take your tissue paper and cut it up into tiny pieces. Place a layer of these over the Vaseline. Make them overlap so that the base is quite covered. With a blunt pencil gently press the paper into the hollows of the eyes and along the shape of the nose and mouth. When all the plasticine is hidden by paper, put a thin coat of mucilage over this. Diagram II shows how it will look.

Repeat this with layers of paper and mucilage until you have eight layers of paper, and end with a paper layer, leaving this top one without a coat of mucilage.

Put the whole thing aside for 24 hours to dry. Do not be impatient, for the more it has dried the stronger your mask will be.

When it is quite hard and dry, gently remove the plasticine. You may



Dry mask ready to be painted.

like to use a spoon or blunt knife to lift it out, but the petroleum jelly will help it to slip out quite easily.

Now your mask is ready to be painted. Ordinary water colors used fairly thickly will turn it into a gay little face which can be hung on the wall by threading a thin string through the top with a needle. If you wish you can stick on some front hair of colored wool or frayed-out string. They make amusing decorations for a party and could be used as place favors on a table.



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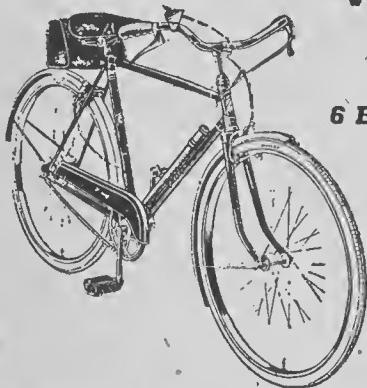
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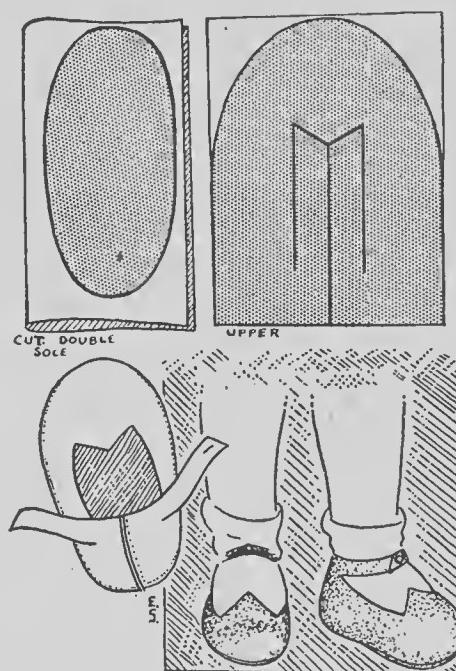
Slippers That Wear

BRIGHTLY colored slippers, dressed up with ties or ribbons, embroidery or tinkling bells, make an attractive gift for a child of any age. They are appreciated more if they are made of sturdy material and stitched so that they will wear well.

The greatest difficulty in making slippers is to attach the sole to the upper so that the stitching doesn't break away after a few wearings. I have found a method that does away with frequent restitchings.

The backs of a pair of worn men's leather mitts, if they are in good condition, or an old leather purse will make good soles for slippers for a child of five or six. Make a pattern for a sole that is an inch larger all around than the child's foot. Then cut out two leather soles.

To make the inner soles use layers of heavy material taken from an old coat, jacket or overalls. Make a pattern that is slightly larger than the child's foot and cut out four or six



insoles. Stitch the layers together to make two thick inner soles. Place an inner sole on each leather sole then fold the edge of the leather up over the material. Being careful not to sew through to the bottom of the slipper, stitch the edge of the leather to the insole. Heavy duty or linen thread and fairly close, even stitches are essential.

Add crocheted or felt tops, sewing them to the insoles along the same line as the leather sole. Last of all put in inner soles to match or contrast with the uppers. These are easiest to attach when the slipper is turned inside out. You will find the soles of these slippers will not need restitching.—Mrs. L. Jacobsen. ✓

To keep frost from forming on windows in winter rub the inside of the panes with a solution of one ounce of glycerine to one pint of rubbing alcohol.

When soot is spilled on carpets or rugs, sprinkle dry salt over the spots. It can then be swept away without smearing.

Don't shake your electric toaster to get the crumbs out as this may harm the heating apparatus. Instead, use a small, soft paint brush to brush out the crumbs; it will easily reach the inner parts of the toaster.—L.P.B. ✓



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Leftover fats and grease, some lye, and a little of your time are all that are needed to make top-quality soap for a cost of only about 1¢ for a large bar! There are several methods which may be followed; the best will be found on the back of Gillett's Lye tins. There are, of course, many other uses for lye around the home including:

SLOW DRAINS

Simply pour down 2 tablespoons of Gillett's Lye followed by a cup of hot water. Allow to stand for 30 minutes. Repeat if necessary. To keep drains free-flowing, use 2 tablespoons of Gillett's each week.

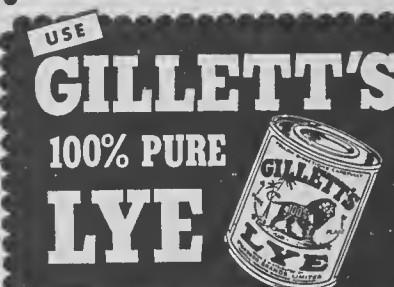
CLEANING STOVES

Lye is the natural enemy of the greasy dirt that can gather on and in stoves. Scrub with a stiff brush and a solution of 2 tablespoons of lye in a gallon of water.

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BABY'S COLDS

Help Nature To Fight Them Off

Medical Science denies there is any such thing as a cure for colds—only Nature herself can do it. So when baby's sniffles, or stuffy breathing warn you of a cold's presence—cooperate at once with Nature. See that baby is kept warm, gets plenty of sleep and take extra care that the bowels are thoroughly cleared of harmful wastes. To do this without upsetting baby's whole system and further weakening it, try Baby's Own Tablets. Mild, yet act promptly in getting rid of irritating materials that make baby restless and feverish.

One Nova Scotia Mother says: "My baby of 26 months caught a nasty cold so I tried Baby's Own Tablets and she threw this cold off quicker than ever before. I certainly am for Baby's Own Tablets from now on." Equally good for restlessness and peevishness resulting from irregularity at teething time, for constipation, digestive upsets and other minor infant troubles. Taste good and are easy to take! Get a package today.



For Winter Sewing



The Country Boy and Girl

HOW the wind whistles as you whizz down snowy hills and strawstacks on a sleigh or toboggan! Sometimes you have to lean over to one side or roll off your sleigh to avoid crashing into a tree or stump, but that only adds to the fun. There are fewer strawstacks for sliding now that the farmers use combines. In the hilly parts of the country boys and girls have many favorite sliding places. When the day becomes chilly they gladly return to the warmth of the house.

Here is an indoor game to play at home or at school, called "Musical Shoe." You need a gramophone or someone to play the piano for this game. Players stand in a circle and pass a shoe from one person to the next while the music plays. As soon as the music stops, the person holding the shoe must drop out of the game. The game goes on until only one player is left, and he is the winner. No one must throw or grab the shoe. While the music is going on, each player must take the shoe handed to him. He refuses the shoe if the music has stopped.

The Runaway Toys

by Mary Grannan

THE little black scottie dog lay on the hearth rug, and watched his little mistress. She was whirling her Christmas doll around, around and around, by the arm. The little black dog growled, as much as to say, "Don't do that, you'll break your doll."

Kitty understood. "I'll do it if I like," she said. "It's my doll. I got it for Christmas from Aunt Jane. I can do what I like with it." She whirled it more violently than ever. The cord that held the doll's arms together, broke. The body of the doll went flying across the room, to land behind the chesterfield. "Oh," cried Kitty, angrily, "now see what you've done? You made me break my doll. Well, I don't care. I have another doll."

She tossed the little rubber arm that she held to the floor, and went to the bookcase. Kitty was going to read one of her Christmas books. She chose a large picture book, and began to turn its pages. She paused at picture of Little Bo Peep. "I think I'll cut you out for a paper doll," she said. She ripped the page from the book and went in search of the scissors. She could not find them, and angrily squeezed the page, and tossed it into the fire. The scottie dog growled again.

"Keep still, Scottie," she said, "it's my book, and I can do as I please with it. If you don't believe me, I'll show you. I'll tear out Little Boy Blue and Jack Horner and Old Mother Hubbard." She did.

The little black dog left the room. He could stand no more. Ever since Christmas, when Kitty had received many delightful gifts, he had seen them destroyed, one by one. The little blue music box would no longer make music. The jack-in-the-box no longer jumped up and down. His springs were broken. The teddy bear's shining button eyes had been pulled from his cheerful chubby face, and were lost. The caboose of the train had disappeared, and the engine was sadly in need of repair.

Scottie was going to teach Kitty a lesson. He was going to hide every toy and book that she owned. He laid his plans very carefully. That night,



Ann Sankey

when the house slept, he was going to carry the toys to the playhouse at foot of the garden. Kitty didn't play in the house in the winter. He could unhook one of the windows. He knew, also, that he could get out through the cellar window, near the furnace. Stealthily and quietly he worked. He took the eyeless teddy bear first, then the armless doll. After these, he carried the books, the rag doll, the panda, the monkey-on-the-stick, and the music box. He had more trouble with the doll's trunk and bed than any of the other toys, but he managed. The doll dishes took considerable time. There were so many of them.

Scottie was determined that he would leave no playthings behind. The grey flannel elephant was easily transported by its trunk, and the velvet cat was carried by its tail. He rolled the ball to the garden, but he carried the spinning top. The doll's chair slipped from his mouth as he was going down the stairs. It clattered to the bottom, making a great din. Scottie held his breath. He was sure the household would awake, and come in search of the noise. He waited. There was no sound of anyone coming. It was almost dawn before he finished his tiresome task. He then went to his basket under the kitchen table, and fell asleep.

When Kitty woke that morning, and looked about her room, she couldn't make out for a moment why it looked so empty. Then she realized that her toys were gone. The doll's bed and the doll, which she had left near the window, were missing. So was the teddy bear from the window seat. She ran to her toy box. It was empty. Her books were not on the bookshelves. A strange fear clutched at her heart. Her mother would surely know what had happened. She went down stairs, but her mother said nothing about the missing toys.

Kitty was quiet during breakfast. She ate almost nothing. "Aren't you feeling well, Kitty?" asked her mother.

"Yes, Mum, I'm feeling fine," the little girl went on. "Are you going to houseclean my room today?"

"No," laughed Kitty's mother. "I cleaned the whole house before Christmas. I won't be housecleaning again until spring. Why, dear?"

Kitty's lips trembled in an effort to keep back her tears. "My toys have run away, Mum."

"What?" said Mother. "What did you say?"

"My toys have run away," repeated Kitty.

"Nonsense," said Mother. "Your toys couldn't run away."

Tearfully, Kitty told her mother about her empty room and bookshelves. "I haven't taken care of them," she sobbed. "I pulled the eyes off my teddy bear, and I tore my books, I twisted the arms off my doll, and I stepped on my train. I know they've all run away and left me."

Mother raised her eyebrows. She knew that the toys couldn't have run away, but she also knew that her little girl was feeling guilty about her abuse of the things that had been given to her. "I take it that you're sorry for the way you've used your toys and books," she said.

Kitty nodded. "I am. I loved my toys, but wasn't kind to them. I wish

I could tell them so. I wish I could tell them that I'd take care of them, always, after this."

Scottie barked, and jumped from his basket under the kitchen table. He caught the skirt of Kitty's dress by his teeth and tried to pull her toward the door.

"Scottie knows something about this," said Mother. "Let's go with him."

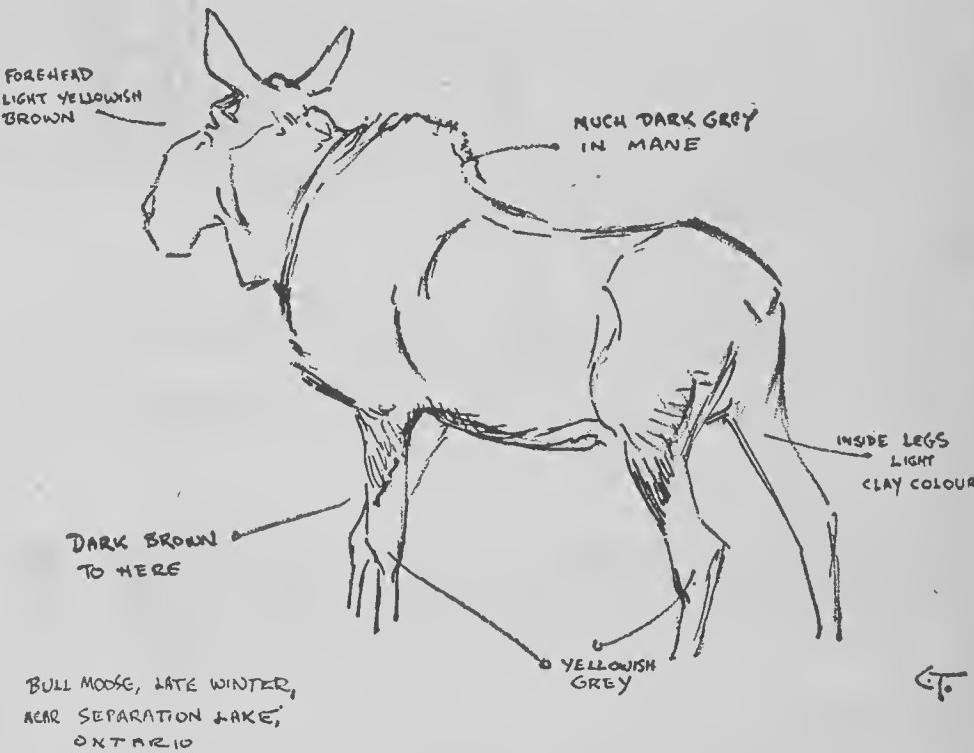
They followed the little dog to the playhouse. They found the toys in a heap on the floor. "It must have taken him all night to do this," said Mother.

Scottie barked in agreement. Kitty laughed happily. "I'm glad you did it, Scottie. You tried to stop me when I tore my pretty book, but I wouldn't stop. I'm ashamed, Scottie. I'll keep the promise I made in the kitchen. Will you believe me, and help me to take my toys back to the house?"

Scottie's answer was to pick up the teddy bear and dash for the kitchen door. He had begun his task of returning the runaway toys. V

Sketch Pad Out-of-Doors

No. 47 in series—by CLARENCE TILLENIUS



FLYING in a light plane over the winter woods offers an unmatched opportunity to study and sketch the large game animals. The naked trees, with no leaves to hinder the view from above, the blanket of snow against which even the ashy-colored Canada lynx stands out in bold relief, make it possible to study the animals in detail in a way not often possible when on foot.

On many occasions, pilot friends with whom I have flown have circled in a tight spiral above family groups of moose or caribou so that I could make close and detailed notes on color, shape and movement.

The kind of sketch most useful at such times is the simple line sketch shown above, with added notes on color areas, background, time of day, sunny or overcast, etc. It is far too cold in a plane to attempt rough color

notes. Watercolors freeze immediately. The vibration of the light plane combined with the cramped quarters have made me stick to pencil or charcoal.

Flying is expensive so you must be prepared to make the simplest outline possible that will still get down essential facts. It is a waste of time in these notes to put in anything that can be done or seen on foot. Do not attempt to add any indications of background color or detail in the drawing. Make written notes on these things but be sure you are judging them correctly. For instance, suppose a moose is standing beside a spruce grove. A moose is dark against the snow, but perhaps the light falling on his back makes it appear lighter than the dark spruces beside him. If this is so, make a note of it. These are the sort of notes, made on the spot, that are beyond price when you come to paint a picture. V

Night with No Moon

Continued from page 12

else? And they'd be around fast—the Pacific bottom currents don't give you more than a couple of days before they break the best boat in two.

One thing I told myself as I turned in. This time it would be different. This time we'd play my way. Maybe that would help make up for the past . . .

I'D just finished shaving the next morning when the desk phoned and said there was someone to see me. "Tell him I'll be right down," I said.

"Yes, Mr. O'Rourke," the clerk said. "Only it's a she not a he."

Anita—instead of Pop? I put on the one good suit I possessed and went down. It wasn't Pop Whalen's daughter. It was a girl I'd never seen before, a tall blonde who looked as if she might have been beautiful if she'd cared enough.

"Frank O'Rourke?" She didn't know me, either; I could tell by the quizzical look in her eyes. "I'm Ginnie Harris."

Someone had put a nickel in the jukebox in the cafe that adjoined the lobby. *Hi, Nellie! Ho, Nellie! Ho, the Nellie B!* Maybe it was that song—Hank's song. Maybe it was the look the clerk had given me the night before. Maybe it was just that after so many years of it, you feel you'd like to dish some dirt back for a change. And you know—somehow you know—your chance is coming.

Ginnie said: "You knew my partner, Hank Maroni."

"Your partner!"

"Yes. I joined with him four years ago." She saw my look and smiled. "I handled the business end of things."

Maybe Hank had told her how he got himself a boat. Maybe he hadn't. All I knew was Ginnie hadn't come to talk over old times with me.

I invited her to breakfast—until further notice, I could still charge that to the hotel bill—and Ginnie talked business. Not that it made a lot of sense to me, but I knew it was leading to something.

First she asked me if anyone had asked me to dive to the wreck of the *Sea-Queen*. When I shook my head, she asked would I if they did? I said I might—for enough money. Ginnie thought that once over.

"That's my boat now," she said. "What's on it belongs to me."

I didn't ask the obvious *so what?* Ginnie said: "Everyone on the west coast knows you're the one diver who might be able to go down to that boat. I'll pay you not to." She looked down at her coffee, and her face was white. "Mr. O'Rourke, if you're curious, I'll tell you why. I loved Hank. Whatever he did to you I don't know, but I loved him. Whatever secret he had in that boat belongs to him. Don't dive and I'll pay you every cent you ever invested in the *Sea-Queen*. And I'll put it in writing now."

I watched her, almost unbelievingly. When she had finished, her cool eyes looked up at me. "You may phone my bank and verify this. They will hold the money for you on the terms we've arranged."

There was just one thing she'd missed; and I couldn't see any sense

in not telling her. "What if they don't ask me?"

"But they will, Mr. O'Rourke." Ginney stood up. "Last night a diver called Nooney went down. He's dead—the bends, I think they call it." She smiled. "I hope you'll think I wanted Hank's debts squared all the way around."

I WAS still thinking in the hotel room when a knock came on the door. Pop Whalen this time, I thought, but I'd guessed wrong. It was Anita.

"Hello, Frank," she said.

She'd been 18 the last time I saw her. Maybe now the eyes were a little older, but nothing else had changed. If I hadn't known she'd wanted us to break up, I'd have thought that look in her eyes was a sort of pain—the kind a guy can know in his heart when laughter and windblown hair remind him of someone again.

"Come on in," I said.

Anita hesitated. "Dad's downstairs—"

"But you're the soften-the-way committee." I hadn't wanted to talk like that. Friends double-cross you. Once in a lifetime you get enough veterans' credits to buy a boat. And you can't hold it against a girl for wanting to call it quits. So maybe it was Nooney—or maybe it was that after six years, it has to come out somewhere.

"Any other job your father would call in his Navy boys, maybe even some nice-talking civilian character who'd learned in a nice safe diving school. But a dirty rotten death-trap job that's already killed one man—go get Frank O'Rourke! Remember him, Anita—the sucker? The softhead?"

She kept on looking at me. She said steadily: "Maybe I'm making a mistake again. Maybe you aren't the Frank O'Rourke I was looking for."

"Maybe you're sure right." I went over to the phone and told them to send Pop up.

I hadn't wanted it to hit me like that again, but all of a sudden I was remembering too much. How I'd trusted Hank. How I'd loved her . . . Okay—now my turn had come to deal. If I played right, I had a last chance to get back into business again. *If I played right . . .*

Pop had got a little greyer since I'd seen him last. We didn't shake hands, and when I offered him a cigarette he shook his head. They sat in the two chairs waterfront hotels allow you, and I sat on the bed, and Pop Whalen got to the point.

"You know why we're here?"

"You want another sucker to go down and prowl around the *Sea-Queen*?"

"And we want him badly," Pop said, in a clipped voice. "Enough to pay him well."

"And if he doesn't live, you give the money to charity?"

Pop got a little white. "That's the chance he takes—like Nooney took it. He knew the score—but he had guts enough to try."

"Meaning?"

"Meaning nothing!" Pop yelled. Suddenly the fire died in him. "O'Rourke, I may have been wrong on a lot of points, but I haven't got time to go into that now. Maybe we've



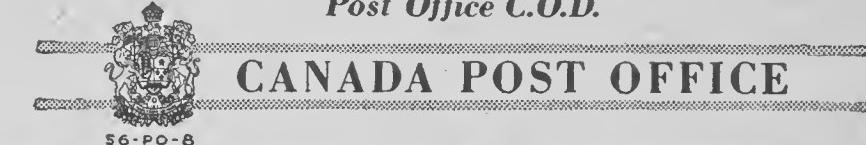
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The Navy Intelligence business belted me one. I tried not to show it.

"You know the chances of getting down there alive: Nooney—"

"You can't think of Nooney—what good does it do him? Frank, look!" For a minute he was like the old Pop I knew. "You went 90 before—it isn't much further. Some divers can do it—some can't—" He saw my look and his tone changed to its former flatness. "I'm not pleading. We'll pay you \$1,000 to try. Ten thousand if you do the job. You have to make up your mind now."

"Okay," I said. "The first thousand, please."

I gave that to the hotel clerk, got a receipt, went out to Pop's car. None of us talked a lot. We all rode in front, Anita in the center. It was a small car and we were crowded. Maybe that's what made it hard to speak.

I tried once. "The minute anything goes wrong down there, I'm coming up. You lose a thousand bucks of taxpayers' money."

"Sometimes it's worth it," Pop said, his eyes hard ahead, "just to prove you were right about something."

It hurt—a lot. Somewhere in those six years or so I'd got to figuring that somebody owed me something for something. I set my own mind again. Well, that's how I was going to play it. Oh, sure, I'd make a good show for Pop—and the thousand dollars—and then I was going right back to collect from Hank's girl, Ginnie. I didn't owe any of them anything. This time I was in business for me.

That's what I thought. Maybe I hadn't counted on a lot of things. Like the Navy fellows they had lined up on the big diving tug—young guys like Hank and I had been once. And they were looking at me like I hadn't seen anyone look since that big job during the war—when Pop had brought me home. *Okay, suckers, you'll get the hero-worship out of your eyes soon enough!* That's what I was saying in my heart, but it wasn't convincing enough.

THE sky was overcast and a stiff breeze blew off the sea. The people on that boat were as nervous as a bunch of kids. I met the tug captain, the second engineer, a guy in civvies from Naval Intelligence. They were all looking at me as if I was the world's last diver and their last hope. It didn't help any that Anita had come along.

"If you'll come this way, Mr. O'Rourke—" It was Siddell, the fellow from Naval Intelligence. "Weather office says we haven't much chance of escaping a squall. It might mean we'll have to work through the night. We'll start by my telling you what to look for."

We went down to the captain's cabin, and a galley boy brought us coffee. Siddell put a blueprint on the table. "Here's an exact drawing of the *Sea-Queen*. If you study it, Mr. O'Rourke, it'll save time when you're down."

I pushed it away. For some guys, a boat can be like a girl—a dream you remember always. I caught the puzzled look in Siddell's eyes. Behind me I heard old Pop cough.

"Guess I forgot to tell you, Siddell. He used to own the *Sea-Queen*."

"Oh!" The Intelligence man looked anything but perturbed. "You knew we were chasing Maroni. Do you know why?"

"I'd like to."

"We think he was in touch with foreign agents," Siddell said. "You know we have not got the world's largest submarine fleet? An almost foolproof way of passing on information to potential enemies could be worked off our shore waters—if the information was relayed to submarines." I was getting confused about all the things Siddell expected me to know, but it was interesting listening. "We've had Maroni tagged for a long time. He was even sympathetic during the war—when danger makes strange bedfellows. No use going into details, but we think he was making contact along the coast here. If you can find any documents down there—anything that looks like it might have been used to help a power unfriendly to us—well, you know why we want it. There are a lot more people like Maroni still at large—he didn't work alone."

He sure didn't. There was Ginnie Harris, for instance, the blonde who'd offered me a lot of money *not* to go down. An hour before it had seemed simple enough. Get the mostest doing the leastest. Now it had something to do with the flag that had flown so proudly on our ships during the war. A flag I'd loved because it meant that under it, a guy had a chance. . . .

I was thinking maybe I understood why Nooney had come to me—to see if I would dive. And when he'd gone down, maybe it was only because somebody had to. I looked at Pop and managed a tight smile. "Taxpayers' money," I said. "Let's go up."

THE kids from the Navy were ready and waiting. Pop was still teaching 'em right. The mixing tank was ready—you need both oxygen and helium for that kind of diving—the 200 pounds of gear laid out. From force of habit, I checked everything—the compressor, the decompression chamber, the intake and exhaust valves. It's not necessary—just gives you a feeling of reassurance.

"Twenty minutes a dive, that's all," the captain said when I was pulling on the rubber gloves. "If you're in trouble—"

I felt like telling him that, at 636 feet, if I was in trouble, I'd probably come up with my head all jellied. Instead, I put on the forward part of the helmet, touched the phone switch with my chin to see how it fit. Anita came over.

"Frank, has it been quite a while since you dived far? I mean—does it make a difference when you're out of practice—"

"I dunno," I said. "If it does, I'll tell you in my next reincarnation."

"All right, go down there feeling that way!" Anita choked. "You said it back at the hotel—softhead!"

I was aware of her running back to the rail, of her father's set face staring

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at me; then I gave the captain the signal and went over. The water pushed the clammy rubber of the suit against my body. At six fathoms I adjusted the exhaust valve.

"How's it in the mixing tank?" I called up to the captain.

"Pressure's okay." His voice shattered inside the helmet.

"Okay. I'm going down fast."

The smoothing iron that was the tug disappeared into the greyness above. Synthetic air warmed my face. Every 15 fathoms I checked with the captain. You have to watch too fast a descent. At 100 fathoms, the pressure on my body was 20 tons to the square inch. That's where the helium comes in. The average diver can't go over 50 fathoms; the pressure forces too much air into his lungs and when he comes up, the nitrogen shoots all the way into his brain—and that's it. Mixed with helium, though, the body can dispose of it—providing nothing goes wrong. At that depth, the slightest decrease in pressure would finish a diver so fast he wouldn't even be able to call over the phone.

I hadn't intended to touch the wreck—not when I left the hotel. But after Siddell's talk, something greater than all the bitterness of six years was inside me. What kind of game had Maroni played all his life? How far did it go back? Down in the cabin I was pretty sure I'd find the answer—if I could make it.

"104 . . . 105!" The strain was telling on the captain. "O'Rourke, you're nearly on it!"

I closed the exhaust a fraction and breathed deep, the worst headache I'd ever had pounding in on me. It was almost pitch black down there, but the big torch cut a circle on the dim side of what had once been the *Sea-Queen*.

I began prowling. The door of the engine room was swinging open and shut with the ocean currents. Walking along the deck was like walking into a headwind. I'd been lucky—down okay and right on the nose of the *Queen*. I had just time to make fast a living line and spot the hole in the side of the ship when the captain's voice told me—urgently—it was time to be coming up.

I almost didn't hear him because I'd seen something that told me, without anything else needed, that Siddell was right. Hank Maroni had never hit the rocks. True, the *Sea-Queen* was wedged in a crevice—but the jagged hole in her side had been blown from within—not from without! It looked like a torpedo from inside had hit her! Maybe an explosion in the engine room—maybe a deliberate sabotage—

"O'Rourke! Are you all right?"

The captain's voice was almost a buzz. It was time to come up.

ISAT in the sun and Anita sat on a deck chair opposite. It was almost sunset, two hours since I'd come up, and after that brief burst of warming light, the sky was closing in again. In the grey murk, Anita's eyes looked as grey as the sea. Her father and Siddell were at the far end of the deck, talking. With the evening roll of the Pacific, they came toward us.

"You know we want you to go down again," Siddell said. "After tonight there's no telling. But you know the odds?"

I knew them. If there was any helium left in my bloodstream, the second dive would finish me. I thought Pop looked tired and old. I felt tired and old.

"I got a story to tell you," I said, "before I dive again. I dunno what went wrong once, or where Hank Maroni fits in yet, but I'd like to tell you."

I told them of my boyhood in an orphanage without a dad. I told them why I joined the Navy, the dream I'd had of building a big salvage business. I told them of Hank and the double-cross. I didn't say anything of Anita calling it quits—or the way the Navy cut me cold on everything I bid on, but I guess from the way Pop looked down, he knew I was telling them that was the thing that really put me on the skids. Then I told them about Ginnie.

That was the one thing nobody looked surprised about. Siddell smiled. "She was no more Maroni's sweetheart than I was! We've been watching her, too—we knew she was up to see you, O'Rourke." He got up. "If you insist on going down, I'll tell you the rest later. If you don't, I'm not going to hold it against you—"

Anita cut between us. I think she was crying—it was too dark now to tell. "Frank—"

"No," I said. "If you have anything to tell me when I come up, that's okay. This way, I have a feeling you're being sorry for me."

It was still okay going down. I almost didn't need the torch. I remembered every line of the old *Sea-Queen*. A hundred and fifty feet of seagoing boat, twin diesel engines, the galley hatch forward. . . . It was tricky, that was all. Foul your lines around the generators—hit the exhaust valve too hard—

"Where are you now, Frank?" It was Siddell on the line.

"I want to see what caused the explosion."

"Never mind! That doesn't matter—we know he blew it up to keep us from searching the boat. We want to know what he had there that was so important. Find him—maybe you'll find the answer."

Hank was in the cabin where we'd eaten our meals, rested, slept. It was hard to tell how he'd got trapped; my guess was the explosion came before he was expecting it.

The headache was getting worse. And I was feeling strangely light—very, very, very light. . . .

"O'Rourke!" Siddell again, rousing me. . . . He kept talking, urging me. I kept flashing the torch over the cabin—nothing that he wanted—no maps—no documents—

The *Sea-Queen* rose, like a dog trying to say hello to its master. The treacherous Pacific undercurrents were starting to work her. She settled back, rose gently again. It didn't take much to foul those lines—

"O'Rourke! You haven't got much longer—"

Siddell didn't know the half of it. Time had run out for me in more ways than one. If I came up now, empty-handed, I'd have accomplished what? Nothing. I'd told them a pretty good story up there—a thousand dollars' worth of story—maybe—but that wasn't

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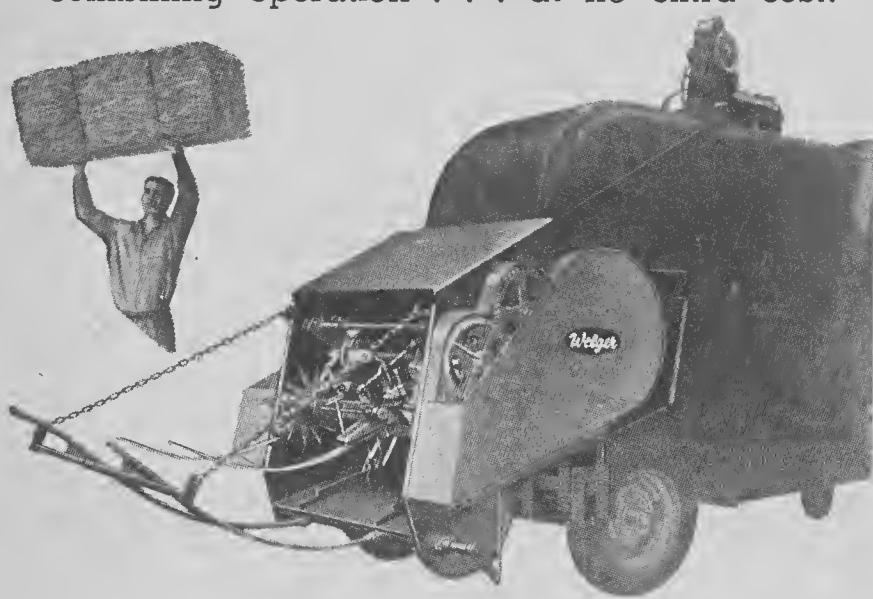
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enough to change the past. The Queen heaved.

My beam was resting on something that held me like a magnet—the old homemade phono-radio combination Hank had pieced together a long time ago. All of a sudden it came to me. No man in his right mind would scuttle a good boat because he carried papers or documents. But if that complicated record-player was a broadcasting unit that couldn't be thrown overboard—

"Siddell!" I was too light-headed now, too staggers on my feet. "Gimme one more minute—no, two. Time to get something loose here and up on the deck. I'll fasten it to the line—then take me up. . . ."

THERE was music playing. "Hi, Nellie! Ho, Nellie! Ho—the Nellie B!" Then a jar of static and a cryptic voice—Hank's voice—repeating something unintelligible. I was on deck. There was still no moon. But I knew the face that was bending over me.

"Frank—oh, Frank—" I could smell the spray from her hair and that first night was beginning again.

"Was it what they wanted?"

"Yes." Her head nodded above me. "Mr. Siddell figured it at once. When you played a record at the normal speed, 78, it plays ordinary music. But when you set it at thirty-three and one-third, it broadcasts information on a short-wave band. Oh, Frank—"

"How long?" I asked her. "That must have been why he double-crossed me. Figured to use the boat to make contact with submarines—"

"Don't you see?" Anita was crying. "They suspected him almost as soon as the war ended. But you two were partners. They had nothing definite—and we couldn't speak. That was just the beginning. People tried to tell you Hank was no good—and you wouldn't listen. We didn't know how you were mixed up in it. When we began to guess that you weren't, it was too late. Even then we weren't sure. But Dad said if you ever had any sympathies that way, you'd never go down—not after that woman called on you. I—"

Someone must have told her dad and the Intelligence man that I'd got around to talking again. Pop Whalen and Siddell came up on deck. I sat up. The night air from the sea had never tasted so good.

Pop came forward and took my hand. "Frank, sometimes all of us have to be martyrs to freedom. It wasn't easy on me, either—nor on Anita. Maybe you know that."

"I guess I know it." It was hard to talk.

"But there's always another day." Pop's hand tightened around mine. "Siddell here tells me there's more than one reward for good service. There's always an old corvette or patrol boat that the Navy has to dispose of. Not all of them go on public auction—or to the highest bidder. Get it?"

I was beginning to. Pop Whalen let go my hand. "If you young folks will excuse me now, I'll go smoke my cigar in peace."

"Good Lord" I could hear Siddell saying. "All these years and I never knew you smoked!"

And I could hear Pop's chuckle. ✓



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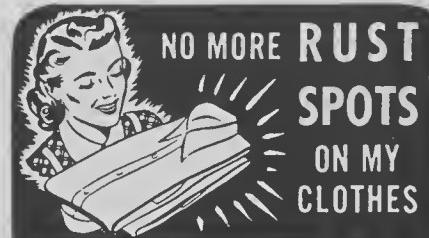
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Let's Look At the Facts

By A. M. STEWART

THE large amount of stock being imported into Canada in the past few years has become quite a grave concern to poultry breeders in Canada. The broiler industry depends almost entirely on U.S. breeders for foundation stock; and during the past three years, the top breeders of high production layers have been shipping and giving franchises to Canadian hatcheries.

I do not wish to imply that Canadian poultry is not good, but I do think it could be better. The trend now is that the Canadian egg producer, faced with higher costs in equipment and labor, and a very unfavorable egg-feed ratio, looks to better stock as the most important means of lowering his costs. We need better-bred stock, with higher constitutional vigor, liveability and persistency of lay. We must meet that demand to regain the market for our stock.

A visit to any of the large breeding farms in the United States will show as high as 150 to 200 pedigree matings, from which they produce their own stock. These birds are invariably from stock that has been trap-nested in the pullet year, and are from the best progeny-tested families. The chicks or eggs offered to the trade are only one generation removed from this class of mating. This is an expensive procedure, and is not warranted, unless sufficient volume of business is available.

The popularity of the cross-bred on commercial egg farms has just one answer—Hybrid Vigor. Good cross-breds do not happen; they must have an inheritance of good breeding. If so, they will often out-lay and out-live the parent stock. The four highest hens of any breed in the 1954-55 egg-laying contests were a Barred Rock-R.I.R. cross. They had an average of 328 eggs in 50 weeks.

I believe we have gone to extremes in the so-called closed flock, where new blood has not been infused for many years. The greatest improvement in purebreds in the past few years is a direct out-cross within the breed. This has resulted in the same hybrid vigor and constitutional improvement enjoyed by the cross-breds. A perusal of the results in the California and New York Random Sample Tests is a very outstanding example.

Little has been added to our knowledge of the practical opportunity and problems inherent in crossing purebreds. Forty-five years ago, one of America's greatest practical scientists said in addressing the graduating class at Iowa State College:

"I believe this is true. The farm stock, the cross-bred stock, have better vitality, are more fertile, are less preyed on by disease, and will produce better than the average purebred. The question of stamina and constitutional vigor has a great deal to do with egg production, on the average. I believe we will get a higher egg yield from the crosses, than from the purebreds, due to greater constitutional vigor."

This case came from a practical poultryman who bred the world's first

300 egg hen and the only cross-bred pen ever to win at Storrs. They established a record that stood for ten years.

NOR have we made the most of the improvement that can be, and is being, made with an out-cross from two purebred strains. When a very old man, Tom Barron of Catforth, England, was the guest of the World's Poultry Congress in Cleveland, Ohio. He has been generally recognized as the world's greatest Leghorn breeder, and could at one time win practically any contest in which he wished to

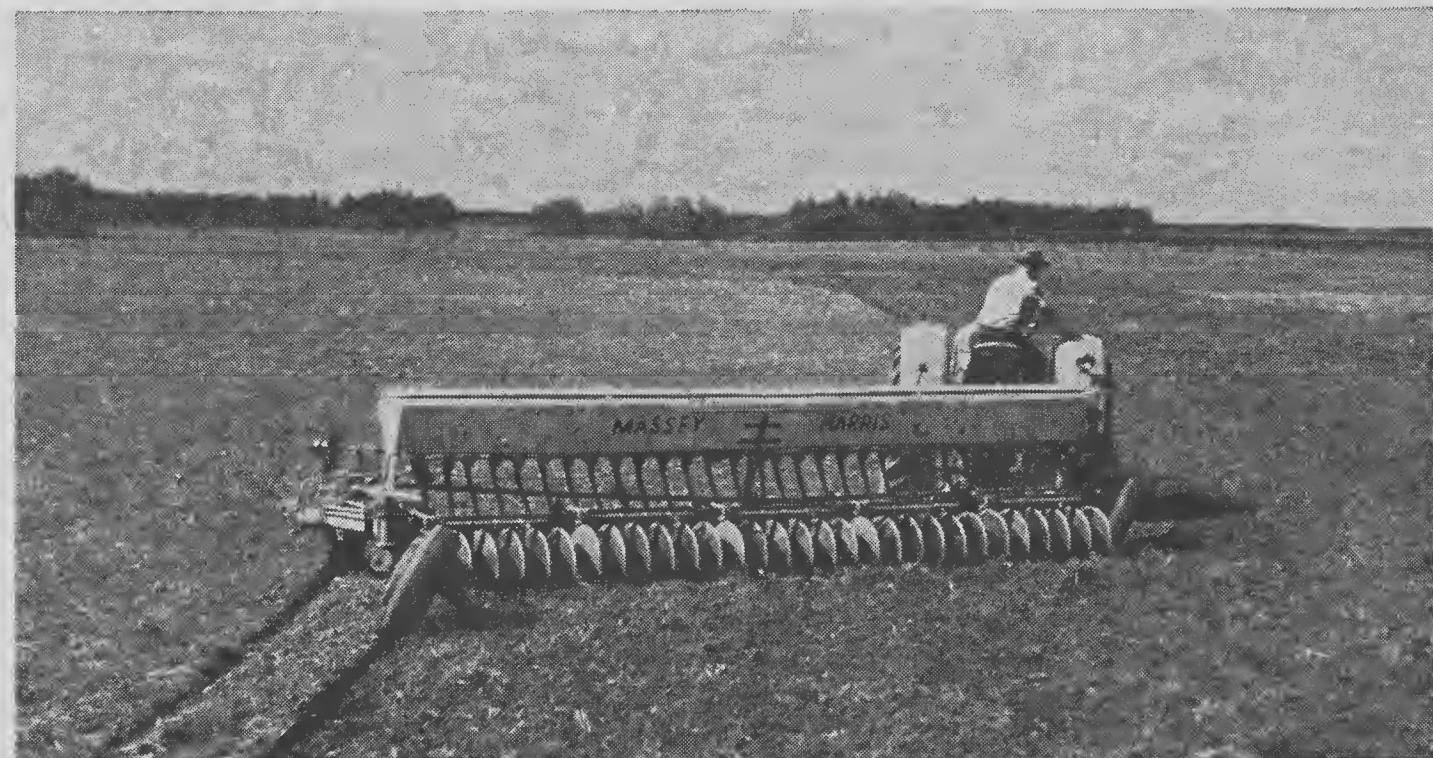
enter. When asked how it was possible for him to so far exceed anyone at that time and what was his procedure in breeding, he said: "They were first crosses of two distinct strains, in whose blood lines I had achieved nickability, hybrid vigor and a fixed inheritance of persistency of lay, over a long period."

The much-mooted advice that we should bar importations is not a realistic attitude. The public will demand good stock, even if it is imported. We have the stock, but the amount is not great enough, nor is it far enough advanced to meet competition.

We have produced in this country the very tops in poultry scientists. Unfortunately they left us for larger fields of endeavor. If one were to name the five greatest of all time, at least three were Canadian-born.

The picture is not as bad as the critics would have us believe. We simply did not meet the situation in time, but we will do so. Most lessons are learned the hard way, but it must be borne in mind that existing conditions cannot be changed by distortion of facts, or even by wishful thinking. V

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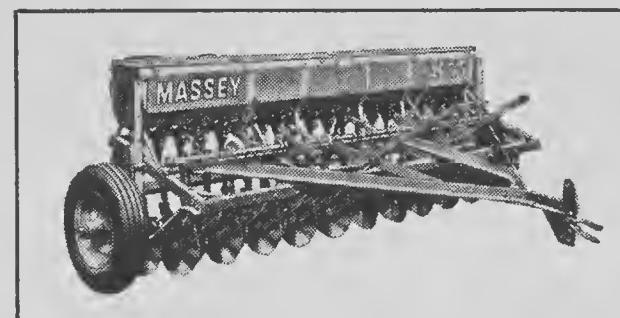


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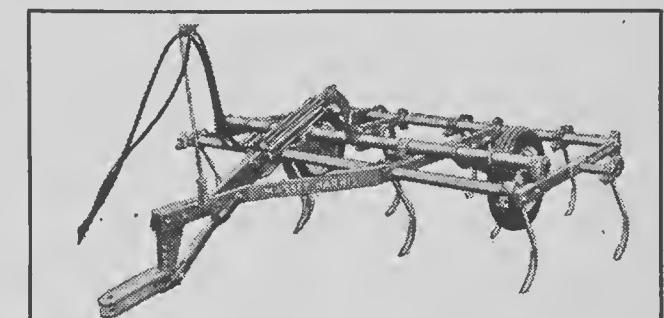
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The B.C. Milk War

Continued from page 13

Governor launched the one-man B.C. Royal Commission on Milk, with Mr. Justice J. V. Clyne as Commissioner, to inquire into all matters in relation to the production, marketing, and distribution of whole milk in the province.

After sitting a total of 71 days, calling 143 witnesses, hearing 55 briefs, viewing 408 exhibits, and pouring over 10,565 pages of evidence and argument, the Commissioner prepared his report, which was released November 15. He included a bombshell of an unexpected sort, which brought the whole inquiry into the headlines of the metropolitan press.

The main body of the Clyne Report contained 12 recommendations, which, to quote the Minister of Agriculture, should provide "a text-book for the dairy industry." In considering these, it is well to remember that the Commissioner confined his whole report to the question of Grade "A" milk. His recommendations appeared in the following order: (1) *The Statute*. Provisions dealing with milk are now contained in seven Provincial Acts. All Provincial legislation dealing with the milk industry should be incorporated in one statute: those pertaining to health safeguard should come under one agency, and be rigidly enforced. (2) *Price Control*. Control of the producer price is necessary to maintain a healthy dairy industry, but consumer price controls are unworkable and benefit no one. (3) *Formula Pricing*. The present method of fixing the producer price is unsatisfactory. Price should be determined by a formula, which recognizes changes in producer costs and money purchasing power, and contains a supply-demand adjustment factor. (4) *Producer Qualification*. Only those farmers who produce good quality milk in con-

produce good quality milk in conformity with public health standards should share in the fluid market. (5) *Equalization between Producers.* All producers of milk of equally good quality should have a proportionate share of the fluid requirements of the whole market. (6) *Equalization between Distributors.* All distributors, co-operative and independent, should be required to pay producers an equal price for an equal product. (7) *Methods of Equalization.* A system of market-wide equalization is recommended, whereby the volume and value of all milk of identical quality received by all distributors, from all qualified producers of the area and sold for fluid consumption during any one period, is related to the value and volume of milk of the same quality, from the same producers, sold by these distributors for manufacturing purposes. If this proved to be unworkable, three more methods were suggested: (a) *equalization by weight quotas*, based on the proportion which the production of any one licensed producer, in any selected quota-forming period, bears to the production of all licensed producers in the same period; (b) *equalization by percentage quotas*, in which a producer's quota, expressed as a percentage, is fixed on the ratio that his deliveries during the quota-forming period bear to the total production of all licensed producers during that period; and (c) *equalization by open market pool-*

ing, in which any distributor is required to accept milk from a licensed producer who wishes to sell to him, thereby eliminating any need for a producer quota. (8) *Fair Trade Practices*. Distributors should be forbidden to exert pressure on the producer price by selling below cost, offering refrigerators, or display and storage equipment, as bribes to get business. (9) *Right to Compete*. The present restriction on the licensing of distributors should be removed, and there should be no barriers to prevent a producer, or distributor, in one part of the province, from selling milk to another. (10) *Pasteurization*. This should be made compulsory throughout the province, except in small communities where pasteurizing costs would be prohibitive. In the latter case, there should be rigid inspection in lieu of pasteurization. Another exception could be made in the case of raw milk dealers, so that persons desiring raw milk could exercise the choice. But raw milk containers should be clearly marked, and the premises subject to special inspection. (11) *Enforcement*. The Milk Board should have full authority for formulating, pricing, and enforcement of set payments, including the power to audit distributors' books. (12) *Alternatives to Equalization*. Because lack of equalization is considered the primary cause of trouble in this industry, and if for any reason, equalization cannot be brought about, the Government should withdraw from the field of price control, and confine itself to the enforcement of health and sanitation standards. It was pointed out, however, that removal of producer price controls will force the price of fluid milk down to the present manufacturing price (about \$3.20 per cwt.) making it impossible for a farmer in the Fraser Valley to maintain a steady supply of milk, and at the same time comply with reasonable standards of health and sanitation.

THE Commissioner's bombshell concerned sanitary conditions found on some of the farms, brought about by a serious lapse in the Government's farm inspection service in that area. To quote: "A great number of farms are in first-class condition and a credit to the community, but the conditions on others which are supplying milk for human consumption are disgusting and deplorable. Although there has been proper inspection and enforcement in the Victoria area and other parts of the province, there is no doubt that the system of farm inspection in the Fraser Valley has broken down entirely, and is practically useless at the present time."

Under normal conditions, the city press won't give space to a farmer unless he murders his wife. But they played this up for all it was worth—in fact, a good deal more than it was worth. City reporters discovered for the first time that both manure and milk were produced by the same cow. A Vancouver paper carried a two-page feature including a picture of a farmer, a cow, a pile of manure, and a bottle of milk, all of which they doubtless discovered on a Fraser Valley dairy farm.

Said a spokesman for Vancouver Island dairymen, who have always feared that too much of the Fraser Valley surplus would find its way over

to their markets: "If sanitation rules were enforced in the Valley there wouldn't be any surplus." If applied to disease eradication, this statement could very well apply. There is a good market for Valley milk in Alaska, for example, but negotiations for shipment broke down last year because it was impossible to certify that herds supplying the milk were brucellosis-free.

The conditions mentioned in the Report grew out of a fantastic situation where six different authorities, ranging from local sanitary inspectors to provincial veterinarians, were empowered to inspect barns, each operating under a different Act. The original Milk Act (1926) designed to improve milk sold in the area, allowed Grades A and B premises to ship milk, and gave Grade C premises 30 days' notice to clean up. Those not making these grades were classified as U Grade (unfit), and ordered to stop shipping altogether. Farms were regularly graded under this act for five years, after which enforcement lagged for a lack of inspectors.

Criticized during the Commission hearings for not supporting farm inspection, the Fraser Valley Milk Producers' Association explained their position to The Country Guide. "We are not against farm inspection: we worked with the government for a long time on this. But, by 1932, inspection had slipped to a point where less than 38 per cent of the A and B farms were shipping Grade A milk. We then asked our members for permission to pay them according to grade; in other words, to penalize them for a low-grade product. By the following year, 85 per cent of them classified as Grade A shippers. We have followed this policy for 28 years. There's more to this problem than barn inspection. To name two: sterilized equipment, and cooling temperatures for milk—these are the things that bring results."

While the Commission findings on sanitation cannot be disregarded, poor conditions were actually found on only a small percentage of Valley farms. All milk is carefully tested in special laboratories before being channelled into the fluid trade, and checked still further before it reaches the consumer. This aspect of the report did, however, bring immediate results in the matter of sanitary inspection: the Minister of Agriculture announced that new inspectors would be hired who would concentrate on barn inspection alone.

REACTION to the Commission report varies throughout the milk industry. Independent distributors favor nine of the recommendations, but are unhappy over the fact the Commissioner disallowed their contention that they had earned a right to a lion's share of the fluid market. In general, the F.V.M.P.A. agrees with all proposals, and has offered to give the independents the benefit of its manufacturing set-up. Some independent producers agree that equalization is fair, if all producers are made to come up to their standards, but are reluctant to take the inevitable drop in income, which is understandable—if they had a choice.

But there is no choice, if the Valley is to have a sound dairy industry—

that point is made clear in the Alternative to Equalization clause. The Report presented unshakeable evidence that a rise in the consumer price would cause a drop in sales, and a corresponding increase in the surplus. It is equally emphatic that to spurn equalization would knock down the producer price from 30 to 40 per cent. If further evidence is needed, producers and distributors can ponder the words of the Minister of Agriculture: "If the industry refuses to put its house in order, I can do only one of two things, either bring in legislation without your approval, or ask the Government to place sanitation and health under control of the Health Department, where it is in other provinces, and leave you to your own devices as far as marketing is concerned."

In short, adopt equalization,—or else!

3-Pound Broilers On 6 Pounds Feed

THE poultry department at the Ontario Agricultural College, Guelph, has produced three-pound broilers with six pounds of feed—a remarkable feed conversion of 2:1. Furthermore, those working on the experiments say that it should be a rather simple matter to develop a strain of birds that would average about 3.5 pounds in weight at ten weeks, with less than two pounds of feed per pound of bird. The diet used for the experiment was made entirely from practical ingredients, except for the high level of animal fat. Peeking into the future, they predict that it should be possible to produce 3.3-pound birds of mixed sexes, in eight weeks, on six pounds of feed, by using highly efficient diets and fast-growing, inherently efficient strains of birds. The practicality of this, they say, will depend to a large extent on the economics of the use of animal fats in feeds.

Since feed represents 75 per cent of the out-of-pocket expense of raising broilers, this is important news to producers.

The O.A.C. experiment started with 404 mixed chicks. When they reached three pounds in weight, they had eaten less than two pounds of feed per pound of bird. At the finish, 390 birds averaged 3.31 pounds at ten weeks of age, with a feed conversion of 2.04.

The scientists expected that the birds might fail to put on sufficient finish when a relatively high level of protein was used right through to market weight, but when slaughtered, the birds dressed out well from the standpoint of both fleshing and finish.

The men at Guelph explained that they prefer to use a relatively high-protein starting diet, and a lower protein finisher for the last three to four weeks. However, these were not used in the experiments. They say that a protein level of 25 to 27 per cent in the starting period would have given faster growth.

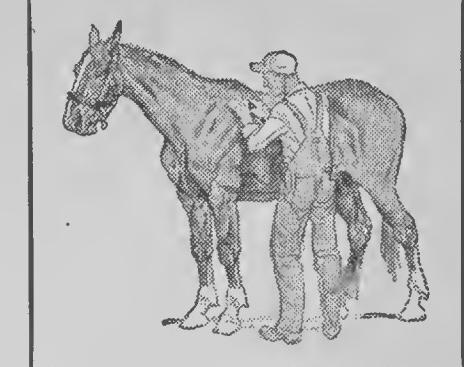
Work done so far suggests that the use of high levels of stabilized animal fat in feeds will eventually revolutionize present concepts of efficiency in broiler production.

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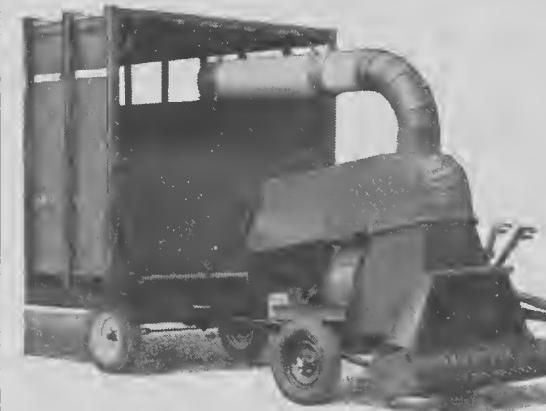
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VOL. LXXV WINNIPEG, JANUARY, 1956 No. 1

The Year Ahead

THE year 1955, except as a moment in history, has left us forever. Many of those who live on Canadian farms were not sorry to see it go. For Canada as a whole, however, it was a good year. The latest estimate of the value of our gross national product is the record figure of \$26.4 billion, and the outlook for the year upon which we have now entered is for further increases.

Our natural resources are being developed rapidly. Exports are increasing for the country as a whole. Canada's stature among the nations shows no evidence of declining. Our population is increasing steadily, employment is widespread, wages outside of agriculture are increasing and people have more money to spend. With sustained prosperity more Canadians are able to eat higher on the hog. They are consuming more of the healthful fruits and vegetables, more dairy products, milk and cheese and some more butter—more ice-cream. Meat consumption is still rising—high-protein beef, nutritious, lean pork, tender chicken and turkey broilers.

For a large number of Canadian farms, especially in the prairie provinces, and more particularly in Saskatchewan, the immediate situation is not as good. The large 1955 production of wealth is not in banks, or pocketbooks, but exists in overflowing granaries and elevators. The world is producing more bread grains than there is a ready market for, and is eating less of them. Canadian livestock prices have held up surprisingly well, considering our nearness to the American market which has been heavily supplied with cattle and hogs. We have an ample supply of butter, which looks like a surplus, but to Mr. Gardiner is not. At this writing hog prices have hit the floor in eastern Canada and the prospect is for somewhat lower prices for lower grades of cattle during the year. The larger number of fed cattle available for the spring and summer months may escape serious decline if marketings are carefully distributed over the season. The poultry industry may well remain on the edge between enough and over-abundance. Wheat acreage will probably be reduced somewhat, which will result in more emphasis on other cash crops. Some additional increase in western livestock production is also probable. In some prairie areas the availability of spring moisture will be more important than usual. Altogether, 1956, except for the grain marketing situation, should turn out to be a fairly normal year, but certainly not a particularly prosperous one for the industry.

A broad, prosperity is the rule, rather than the exception. In Great Britain and Europe, where our principal markets exist, industrial production and exports are both 70 per cent above pre-war, and during the last few years what has been described as "the biggest and most sustained boom in this century" has been experienced.

Unfortunately, the increasing general prosperity of the post-war decade has developed in a jittery political atmosphere. It may be that this very fact has assisted in the avoidance of severe economic recessions. The bogey man has been just around the corner, and the recovery from the devastations of war may have been successful partly because everyone, but more especially governments—has had to walk carefully. In this respect at least, the future is overcast with doubt, and if we are able to continue in our hope for peace, we shall be walking carefully for years to come.

The Problem of Surpluses

CANADIANS, both on and off the farm, are quite familiar with the millions of bushels of wheat which we have available for anyone who can and will pay for it, and with the much smaller quantity

of butter which the federal government would be just as well satisfied to do without. Most people also have a general knowledge of the billions of dollars' worth of farm products which the U.S. Commodity Credit Corporation has an embarrassing interest in. In fact, we are now fairly well acquainted, once again, with the problem of surpluses.

Economic historians will be able, sooner or later, to analyze the current world surplus situation. When they are in reasonable agreement with the politicians, society may be said to have learned its lesson. Meanwhile, however, the problem is acute, and no authoritative voice has been able, so far, to point to a permanent way out. Farmers, of course, are vitally concerned, because the trend of net farm income has been downward for several years. Their position is unenviable, because, surpluses or no surpluses, they must continue to produce as much as they can, of whatever products they believe will yield the highest returns in the face of increasing costs and declining prices.

We in Canada have comforted ourselves with the thought that we have not deliberately increased wheat acreages, and that both our butter and our wheat surpluses have developed as a result of unusually favorable growing seasons. Agriculture is classified as an industry of relatively low productivity, per man hour, or per man year. Curiously enough, however, agriculture has increased production on this basis faster than other industries, though it still has not caught up. Consider, however, the position of the United States. Walter W. Wilcox, in a paper prepared for The American Assembly, which met some time ago at Columbia University, highlighted the problem of U.S. surpluses in this way:

"The 1954 record is baffling. How did we do it? Total farm output equalled our all-time high record, established in 1953 at eight per cent above 1947-49. . . . In 1954, crop production was 100 per cent of 1949, yet we had the most widespread drought on record; around one-third of our rural counties were officially declared drought areas entitled to emergency assistance. Cotton, corn, wheat, peanut and tobacco plantings were reduced by around 20 million acres, by acreage allotments and marketing quotas. Prices received by farmers for products sold were seven per cent lower than in 1947-49, while prices paid by farmers for supplies, interest, taxes and hired help were twelve per cent higher. When farmers equal their highest production levels under such conditions—knowing that they already have the highest carryover stocks on record—how much will they produce in the years ahead?"

Perhaps when agricultural economists have fully assessed the developments in agriculture associated with the current surplus period, they will be able to consider our present situation from all angles, and develop some precepts for our future guidance. They may also be able to place population growth, progress in technology, weather, price supports and other appropriate factors in proper perspective. At the present time a marked uncertainty is our chief possession, in addition to the surpluses themselves.

The Family Farm

THE fear is sometimes expressed by farmers in various parts of Canada that the trend toward larger farms constitutes a threat to the family type of farm. This is particularly true in western Canada where, for example, the average size of Saskatchewan farms has reached 550 acres.

Strong feelings have developed in some areas against large commercial farms. Indeed, the Royal Commission on Agriculture and Rural Life has gone so far to recommend that the government prohibit by law the establishment of farming corporations. Even if such a recommendation is considered unnecessary, no one can question the costliness and the disturbance created by the shift in farm size which has occurred in so short a time. Mechanization to any substantial degree involves relatively large capital expenditures, which, to be justifiable, necessitate upward adjustment of acreages sooner or later. The most economical cost of production per unit may call for two complete outfits on a grain farm, for example, which often means some further acreage expansion. Because farmers are denied the benefit of vertical expansion, they must expand horizontally. This separates them

farther from their neighbors, creates problems of road building and maintenance, school facilities, social intercourse and recreation within the community, and health. It involves, in fact, expensive readjustments.

Nevertheless, the family farm is not seriously threatened by mechanization. This type of enterprise suits agriculture. In Saskatchewan, a farm is no less a family farm because it spreads over 1,200 to 2,000 acres. It may be, however, and often is, a different kind of family farm than before mechanization occurred. Where before, the family lived on the farm the year round and neighbors were closer and school and church better attended, the family may now live in town during the winter at least, so that the children may go to school and find playmates of their own ages. Nevertheless, among the 250,000 farms in three prairie provinces there were, at the time of the last census, only 6,395 farms of 1,600 acres and over.

What is, in fact, inevitable, is not the extinction of the family type farm, but the extinction of some families as farmers. This process has been going on gradually for quite a while, and it may well be that Canadian farms will number between 25,000 and 50,000 fewer in 1956 than in 1951.

The same process is going on in the United States and for the same reasons. It has been estimated that between 1950 and 1955 United States agriculture lost 380,000 farms and is due to lose an additional 400,000 within the next few years. It is not so many years ago when the United States had well over six million farms and Canada well over 700,000. The U.S. will have only 4,600,000 farms by 1960, and the number in Canada could easily drop as low as 550,000. Despite these changes, the agriculture of both countries will be more productive with fewer farms. The consumers of both countries will be better served. The family farm will still be the backbone of agriculture. V

Style

AUTOMOBILES by the pound, or agricultural economics styled to catch the vagrant eye! All, be it noted, "published and distributed in furtherance of the purposes provided for in the Acts of Congress of May 8, 1949." Intriguing, isn't it?

Two professors of agricultural economics at the New York State College of Agriculture must have thought so, because they conducted a survey of automobile factory list prices and protein-food prices. Style, say the professors, sells automobiles today; and style (attractive packaging) also sells protein foods. Competition, they argue, is as much the life of trade with really stylish proteins, as with stylish cars. The novel result is, that, pound for pound and quality for quality, protein foods average about the same price in New York State as cars.

This comparison originated, we gather, in the fact that the automobile is regarded as the most highly prized means of personal transportation, and proteins as the most highly prized foods. Curiously enough, the average price per pound of 64 models of four-door sedans was 65 cents, and the average price per pound of 341 protein foods collected in three supermarkets in Ithaca, was 67 cents. Also, say the Cornell professors, "Rough estimates of the daily expenditures for automobiles and proteins are not much different, about 30 and 35 cents per person, respectively." The range of the per-pound price of cars was from 48 cents to \$1.10, but the range of protein foods was much wider, from eight cents for chicken necks and backs, to \$1.63 per pound for mignon steaks.

Having paid tribute to the ingenuity—and style—of the New York professors, it occurs to us to wonder whether more attention to style might pay off in other fields. During the decade since the war, the most stylish thing in agriculture has been farm mechanization. Research has run it a close second, only because its importance was recognized somewhat more slowly by farmers. Allowing for some exceptions here and there, however, agricultural extension has made a much poorer showing in many of the provinces. Should it, too, be restyled and presented with more paint, pep and packaging? Both provincial governments and farm organizations could well give some consideration to this need. V